



## INSIDE DOPE

by GEORGE F. TAUBENECK

**It Can Happen Here  
Won't We Ever Learn to  
Avoid Obvious Mistakes?**

**Bad Cess to Them**

**Multiplication vs. Division**

**Emotional Economics**

**Biting the Hand that Feeds Us**

**It Was True Then;**

**It's True Now**

**Success Is Suspect**

### It Can Happen Here

Even in the grand and glorious United States of America—the last refuge of free enterprise—entrenched labor unions which have taken their cues from decadent Europe limit the conscientious worker's output by setting up restrictive rules which cut him down to the size of the union's puniest member.

Through devious deals with organized employers, these labor unions have perpetuated monopoly's worst vices by seeing to it that new inventions are buried in the archives, that idlers remain on the payrolls, and that prices are kept high through collusion.

This is the sort of enforced stagnation and sponsored inflation which Collectivists—the communist-tainted teachers and textbook writers—encourage gleefully.

Nobody wins this game.

### Won't We Ever Learn To Avoid Obvious Mistakes?

During the last half century the American people have dissipated their savings, their capital, and their FUTURE in a vain-glorious war and subsequent "relief" programs.

At the same time, they have liquidated both their present assets and jinxed their future aspirations by countenancing lowered productivity on the part of both laborers and thinkers. Union "feather-bedding" rules and sponsored slowdowns lower the productivity of workmen. High taxes discourage the thinkers, so they don't produce as much as they should.

As matters stand now, courageous men with new ideas can't accumulate enough capital to build new enterprises (because the oppressive national debt, heavy taxation, and continuing inflation prevent it).

So, the nation's progress is stymied.

At the same time, the nation is throwing its present wealth down foreign rat-holes. We are supporting insolvent far-neighbors who openly flaunt the work-less-save-less philosophy.

While accepting our largesse, their fifth-column agents taunt us for being suckers.

### Bad Cess to Them

Pedagogues who can't see what's happening to America as a nation, and to all Americans as individuals, surely are poor evaluators of history. Even worse, they are blind to the import of current events.

While the nation's voters retard the accumulation of greater national strength by their espousal of confiscatory taxation, they dissipate that strength which mighty America already possesses. And so, while giving lip-service to Capitalism, they destroy it.

Wouldn't it seem, then, that Americans are headed toward national suicide? Yes! But do the left-wing "educators" realize this? No!

(Concluded on Page 19, Column 1)

## Reg. W Stand on Rental-Purchase Is Further Clarified

DETROIT—Rental-purchase agreements relating to the instalment sale of articles listed under Regulation W must be treated as an instalment sale, and the same down payment and terms required, point out officials of the Federal Reserve Bank.

Rentals without option to purchase do not ordinarily require a down payment, but usually if an eventual purchase is contemplated, a down payment will still be required under Regulation W.

Because some dealers loosely interpreted Federal Reserve Bank rulings on this subject as reported in the Dec. 20 AIR CONDITIONING & REFRIGERATION NEWS, the full text of the board's official interpretation is published herewith:

"In order to increase the sale of a certain type of listed article, a company proposes to rent and deliver to interested persons for use in their homes, such articles for one month at a charge of \$5 under a written

(Concluded on Page 25, Column 3)

## Morris, Thomas Get New Posts at McQuay

MINNEAPOLIS—Philip S. Morris has been elected executive vice president of McQuay, Inc. heating, air conditioning, and refrigeration equipment manufacturers, by the firm's board of directors, and H. Blake Thomas has been promoted to vice president in charge of sales, R. J. Resch, president, announced recently. Morris joined McQuay two years ago as assistant to the president and a year ago was advanced to vice president in charge of advertising, purchasing and credit. He formerly was associated with McQuay Aircraft Corp. and Plexweve Mfg. Corp., both of Los Angeles where he held the position of executive vice president.

Thomas served successively as assistant sales manager and general sales manager. He joined McQuay in January, 1947, following a position in England as general sales manager of Chronomatic Corp., manufacturers of time control equipment, during the war.

## IN THIS ISSUE

Why does the NLRB believe appliance servicemen are not skilled craftsmen and therefore would not be appropriate units for collective bargaining? The thinking of the board is detailed on page 3.

What can the appliance dealer expect during the coming year? Several manufacturer representatives give their views on page 5.

Visitors to the recent Chicago winter marts got first hand views of a number of new appliance lines. A review of what was shown there appears on pages 8 and 9.

Going to the Heating & Ventilating Show? The list of exhibitors on pages 10 and 11 will help you plan your visit.

Ninety-nine out of 100 customers are perfectly happy with a 90-day free service, one-year guarantee on parts contracts, one commercial refrigeration dealer has found. He tells about a policy that has worked for eight years on page 24.

Departments: What's New, pages 22-23. . . Editorial, page 14. . . Key to Air Conditioning, page 17. . . World Trade News, page 20. . . Patents, page 26. . . P. B. Reed, page 27.

## NARDA Reaffirms Its Support of Fair Trade Laws

CHICAGO—A resolution reaffirming the stand of the National Appliance & Radio Dealers Association (NARDA) in favor of fair trade laws has been passed by the group's newly-elected board of directors.

The action was one of several taken by the board following NARDA's first annual convention at the Hotel Sheraton here Jan. 9-11.

Reason given for the move was that the association desired to reiterate its support of fair trade pricing—as expressed at past leadership conferences—in opposition to the recently-voiced and widely publicized personal opinion of Julius

(Concluded on Back Page, Column 1)

## Freezer Sales Pass 400,000 by Oct.

NEW YORK CITY—World sales of farm and home freezers in 1948 by 33 to 36 companies reporting to the National Electrical Manufacturers Association passed the 400,000 mark in October, figures compiled by the association have revealed.

Total sales by these companies for the 10 months reached 402,114 units. Of these, more than 25%, or 105,124, were in the 7 to 8.9-cu. ft. class. Foreign sales during that period amounted 3,536 units.

October sales, however, were 15% below September, totalling 38,982, as compared to 45,733. The October figures were based on reports of 33 firms, while 34 had reported the preceding month.

Only two size categories showed appreciable sales gains. The 4.9-cu. ft. and under category rose from 2,294 units in September to 3,677 in October. The 30 to 39.9-cu. ft. classification jumped from 158 units sold in September to 445 in October. The 60-cu. ft. and over group edged up from 11 to 12 units sold.

In foreign sales, the only gain was made in the 17 to 20.9-cu. ft. category—from 2 units in September to 15 in October.

The 7 to 8.9-cu. ft. category accounted for one third of all sales for the month, totalling 13,326. This was a mere 28 units short of the September total.

The biggest drop in sales occurred in the 11 to 12.9-cu. ft. group—from 6,556 in September to 2,691 in October.

## Birmingham Awaits Opening of Rema-RSES Educational Exhibit, Conference Feb. 4

BIRMINGHAM, Ala.—The city of Birmingham will be the center of activity for the refrigeration and air conditioning industry on Feb. 4, 5, and 6 when the First Southern Refrigeration and Air Conditioning Educational Exhibit and Conference is held at the Birmingham Municipal Auditorium.

The conference and exhibit is being sponsored jointly by the Refrigeration Equipment Manufacturers Association and the Refrigeration Service Engineers Society and is the fourth sectional conference of this type.

Sixty of the leading refrigeration equipment manufacturers will furnish educational exhibits. These exhibits will be similar in scope to those recently shown in San Francisco, Boston, and Chicago. These exhibits are strictly educational in nature. Every exhibit is especially prepared by the manufacturer to indicate how the product is made, how it should be

## York Gears Big Sales, Ad Drive For Buyer's Market

PHILADELPHIA—In the face of the buyer's market which the commercial refrigeration industry has experienced in the past several months, York Corp. is launching its most ambitious sales promotion campaign in history with a goal of substantially increasing the record \$53,000,000 in sales chalked up last year.

For distributors this represents a quota 50% ahead of their last year's sales, they are being told at a series of meetings being held this month throughout the country.

Not since 1940 has York put on a full-dress road show for distributors, but this one, complete with all the trimmings, is hitting the big districts in the North, South, Southwest, Pacific Coast, and Middle West with a fast-moving, two-day meeting.

"We'll have to sell harder now; prewar specialty selling will have to be revived and rejuvenated," declared S. E. Lauer, York president, in opening the meeting here for distributors in the Middle Atlantic district.

"Our 1949 plan represents a 'Proposal for Profit,' and this will require more work, more selling, more calls, more salesmen, and many more dealers," he said.

(Concluded on Page 18, Column 1)

## Executive Setup at Tecumseh Is Revised

TECUMSEH, Mich.—Because of the increasing volume of business being handled by Tecumseh Products Co., a number of changes in executive personnel have been effected, with three new positions being created and several promotions being made to provide more time and manpower for customer relations, it is announced by C. M. Brown, general manager of the refrigeration division.

Frank G. Purcell has been appointed assistant to Brown, with the title of assistant general manager. Purcell was formerly sales manager of the eastern division.

L. W. Larsen has been named sales manager, and will also continue to handle the advertising and sales promotion work for the company and industry relations. He was formerly western division sales manager. D. J. Bowen, who has been in charge of the order and schedule department, and P. G. Colgrove, formerly sales

(Concluded on Page 4, Column 4)

## ASHVE Meeting, Heating Show Open Jan. 24

### Nearly 300 Firms Scheduled To Exhibit at Exposition; ASHVE Will Hear 14 Papers

CHICAGO—The year's big "twin bill" for the heating and ventilating industry will open here next Monday, Jan. 24.

Running simultaneously will be the Ninth Air Conditioning Exposition—Heating & Ventilating Exposition, and the fifty-fifth annual meeting of the American Society of Heating & Ventilating Engineers.

The exposition will be held in the International Amphitheater and will open at 2 p.m. Monday, running through Friday, Jan. 28. After the opening day, show hours will be from noon to 10 p.m.

Headquartering in the Stevens hotel, the ASHVE meetings begin at 9:30 a.m. Monday and include five technical sessions at which 14 papers will be presented. Besides the one Monday morning, the sessions are scheduled for Tuesday morning, Wednesday morning and afternoon, and Thursday morning.

Luncheon meetings are also planned for Monday and Tuesday, an informal party Monday night, and the annual ASHVE banquet is set for Wednesday evening.

Nearly 300 manufacturers of complete systems and components employed in the heating, ventilating, and air conditioning industries will have exhibits at the exposition. Because the International Amphitheater is located some distance away from the Stevens and other "loop" hotels (it's hard by the stockyards, as a matter of fact), a special shuttle bus service is being planned for the week of the show.

Some new products, including new models of packaged air conditioners, are slated to be put on display at the

(Concluded on Page 25, Column 1)

## Retailers Renew Efforts To End Curbs on Credit

WASHINGTON, D. C.—President Truman's "state-of-the-union" message turned up very few items (other than the plea for increased corporate taxes), that are likely to have an effect on manufacturers and sellers of durable goods.

Most vital issue, from the retailer's standpoint, was that the president asked that the government's power to control consumer credit be continued. Several retailer groups are launching campaigns designed to at least revise Regulation W.

The president also asked for the power to provide stand-by authority to impose price ceilings for scarce commodities, and to authorize priorities and allocations for key materials in short supply. In view of conditions, however, it is believed unlikely that such powers would be invoked.

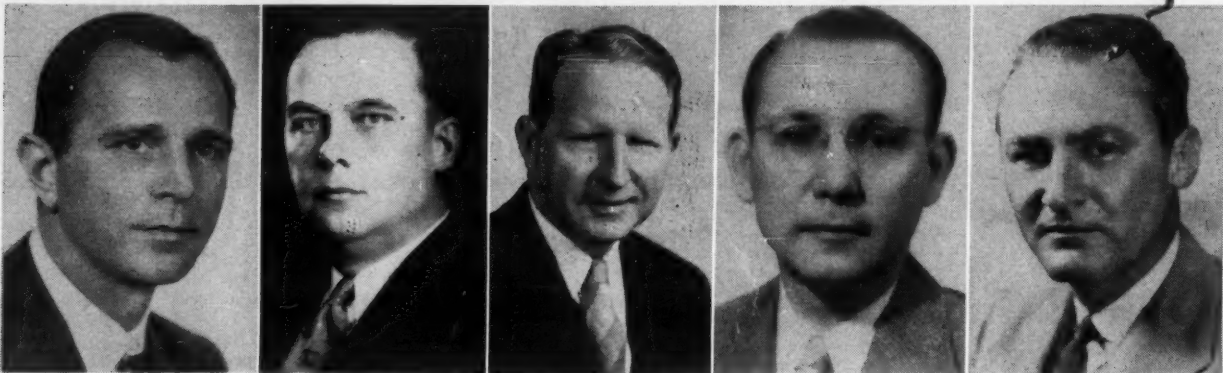
## Rep. Patman Urges Longer Instalment Terms on Autos

WASHINGTON, D. C.—Rep. Patman of Texas has announced that he will introduce legislation to Congress to ease Federal Reserve Board restrictions on automobile instalment buying unless the Board eases up itself. He claims that present restrictions are too severe and that terms should be extended from the present 18 months, to 24 to 30 months.

Board officials, however, have indicated that the restrictions are checking inflation.



## Figuring In Frigidaire District Organizational Changes



L. A. HANLEIN  
Oklahoma City Branch Mgr.

R. E. ROBERTSON  
Asst. Pacific Regional  
Mgr.

J. H. MOLONEY  
Detroit Branch Mgr.

H. J. MILLER  
Oakland Branch Mgr.

H. L. BURNS  
Appliance Sales Mgr.  
Pittsburgh Branch

### Moloney Becomes Mgr. of Frigidaire Detroit Branch

DAYTON, Ohio—Five major personnel changes in the Frigidaire district organization, all effective Jan. 1, were recently announced by P. M. Bratten, general sales manager, Frigidaire Div., General Motors Corp.

R. F. Callaway, Detroit branch manager has retired from the Frigidaire organization after 26 years service and is being succeeded by J. H. Moloney, assistant Detroit branch manager.

R. E. Robertson, former manager of the Oakland branch was transferred to the Pacific region as assistant to the regional manager.

H. J. Miller, previously manager of the Oklahoma City branch became

manager of the Oakland branch.

L. A. Hanlein, former appliance sales manager of the Pittsburgh branch, became manager of the Oklahoma City branch.

Howard L. Burns, factory laundry equipment representative, became appliance sales manager of the Pittsburgh branch.

Moloney began his Frigidaire career as branch engineer in 1926, was appointed supervisor of water cooler sales in 1927, and was on special factory assignments in 1928. He was vice president of Empire Cooler Co., in Chicago in 1929.

He rejoined Frigidaire in 1934 as commercial manager of the Detroit branch and served until 1942 when he was granted leave of absence for war work. He was appointed Detroit general sales manager in 1945 and later, assistant branch manager.

Robertson served as a sales super-

visor from 1928 to 1931. Until 1932 he was a sales manager and was appointed manager of the Oakland branch in 1932.

Miller became associated with the Frigidaire distributing organization in Fort Worth in 1929. For 18 years he was employed in various capacities as service manager, manager of national user sales, and as commercial sales manager. In 1947, he was named Oklahoma City branch head.

Hanlein has been with Frigidaire continuously since 1925. He has been, successively, district representative, zone manager, sales manager of the New Orleans branch, field contact representative on war contracts, and appliance sales manager of the Pittsburgh branch.

Burns was associated with the Baltimore-Washington branch and, until early 1948, served as advertising and sales promotion manager.

## Appliance Wholesaler Inventories, Sales Rise In Nov.

### INVENTORY, END-OF-MONTH (AT COST)

Kind of Business and Geographic Division	Per Cent Change		Nov., 1948 Sample	Reported Dollar Values (add 000)
	Nov. 1948 from Nov. 1947	Nov. 1948 from Oct. 1948		
Appliances and specialties wholesalers.	+41	+11	59	12,257
New England .....	*	*	*	*
Middle Atlantic .....	+27	+13	7	1,566
East North Central .....	+79	+13	9	1,378
West North Central .....	+39	+4	10	1,469
South Atlantic .....	+65	+10	10	1,911
West South Central .....	*	*	*	*
Mountain .....	+34	+8	6	1,340
Pacific .....	+40	+21	9	1,748

\*Insufficient data to show separately.

### SALES

Kind of Business and Geographic Division	Per Cent Change		Nov., 1948 Sample	Reported Dollar Sales (add 000)
	Nov. 1948 from Nov. 1947	Nov. 1948 from Oct. 1948		
Appliance and specialties wholesalers	0	+2	+9	83
New England .....	-21	+1	+10	6
Middle Atlantic .....	+6	-7	+11	16
East North Central .....	+8	-2	+10	15
West North Central .....	-3	-12	+10	12
South Atlantic .....	-4	-14	+8	12
West South Central .....	-13	+6	-6	4
Mountain .....	+3	-4	+21	7
Pacific .....	+26	+49	+4	9

### Reports Show Commercial Sales Off, Inventories Up

WASHINGTON, D. C.—Some decline in sales and increasing inventories were noted by wholesalers of commercial refrigeration equipment and parts and of appliances and specialties who reported November figures to the U. S. Bureau of the Census.

Refrigeration equipment wholesalers saw their sales for the month go 11% below November, 1947, and 16% below October, 1948. For the 11 months of the year their sales were down 7% as compared to the same period last year.

These estimates were based on the reports of 23 firms making aggregate dollar sales of \$740,000 for the month.

Sixteen firms, with a total inventory of \$1,911,000 at the end of the month, said their inventories were 1% above the same month in 1947 and 1% above October, 1948.

Appliance and specialties wholesalers, 83 from all sections of the country doing an aggregate sales volume during the month of \$10,850,000, reported sales unchanged from last year but down 2% from October. Sales for the 11 months were up 9% over last year.

Sixty-one wholesalers in this cate-

gory reported that their inventories at the end of the month, totaling \$12,257,000, were 41% higher than in November, 1947, and 11% higher than in October, 1948.

A regional breakdown on their report appears above.

### Eastern Engineering, Dexdale Mills Plan Ice Cream Vendor

PHILADELPHIA—To produce a new Kenro ice cream vending machine, the Eastern Engineering and Sales Co. here and the Dexdale Hosiery Mills of Lansdale, Pa., have formed a partnership, James E. Kendig, president of Eastern, has announced.

He said that the unit would be manufactured here by the Turbo Machine Co. division of Dexdale.

### Bell, Governair Head, Dies

OKLAHOMA CITY — David N. Bell, 74, president of the Governair Air Conditioning Corp. 513 N. Blackwelder here, died Dec. 31 of cerebral hemorrhage in Wesley hospital.

Bell was born in Tennessee and came to Oklahoma about 50 years ago. He had been a resident of Oklahoma City since 1917.

Bell and W. A. Quinn established the Governair firm more than 10 years ago.

for BIGGER PROFITS!

# ICEBERG

## FROZEN FOOD LOCKERS

FREEZES THE FOOD—NOT THE PEOPLE

"WARM ROOM"

- FACTORY BUILT
- SELF-CONTAINED UNITS
- BONDORIZED—RUST RESISTANT
- CAN BE INSTALLED ANYWHERE

### STORE OWNERS NOW USING ICEBERG REFRIGERATED LOCKERS REPORT 20 TO 25% INCREASE IN VOLUME OF SALES—YOU CAN DO THE SAME! IN YOUR STORE

This startling method of frozen food storage means comfort and convenience for customers. No cold room to enter—only inside the locker drawers is temperature zero.

It will greatly increase store traffic. Locker renters come to your store many more times each week than do ordinary customers—the convenience will attract new customers. Individual sales will be greater. Special Sales Items can be moved more quickly, and in greater volume.

Rental revenues alone will pay the cost of installation in a very short time.

**ICEBERG OFFERS a great opportunity for the good merchant**

#### Easy to Install

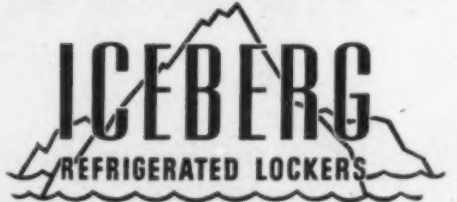
Iceberg Refrigeration Units are delivered complete, fully insulated, ready for installation on your premises. Normally, installation can be completed within 24 hours.

#### Storage Capacity

Storage Capacity is variable from 60 to 480 cubic feet. Each drawer has capacity of 6 cu. feet . . . maximum capacity is up to 80 drawers per unit.

#### Unit Illustrated

is Iceberg Refrigerated Locker Model 680—80 drawers (drawers on both sides), overall length 23' 3"



**ACCESSIBILITY** When open, drawers automatically seal themselves from rest of unit to prevent air leakage. Drawers roll on top-suspended roller bearings—open by finger-tip pull on bar-lock. No sticking due to freezing. Easily and completely accessible.



**FOR SHARP FREEZING** Blastfreeze drawers may be installed in section next to refrigeration section.

**FREE!**

A FREE FOLDER "FREEZES THE FOOD—NOT THE PEOPLE" gives full information and directions for greatly increasing your business. WRITE FOR YOUR COPY TODAY! ICEBERG LOCKERS, Inc. 175 W. Jackson Blvd., Chicago 4, Illinois

see your **"DETROIT"**

# WHOLESALE

for

## Expansion Valves Solenoid Valves Controls

# "DETROIT"

2810

**DETROIT LUBRICATOR COMPANY** General Offices: 5900 TRUMBULL AVENUE  
DETROIT 8, MICHIGAN

DIVISION OF AMERICAN RADIATOR & STANDARD SANITARY CORPORATION  
Canadian Representatives: RAYWAY AND ENGINEERING SPECIALTIES LIMITED, MONTREAL, TORONTO, WINNIPEG  
Detroit: Heating and Refrigeration Controls • Engine Safety Controls • Float Valves and Oil Burner Accessories  
Detroit: Expansion Valves and Refrigeration Accessories • Stationary and Locomotive Lubricators  
EXPORT DEPARTMENT: Box 278, Ridgefield, New Jersey

This advertisement is appearing in national food trade magazines  
SOME TERRITORIES STILL AVAILABLE FOR DISTRIBUTORS



## Text of NLRB Order Which Rules Appliance Servicemen Are Not Skilled Craftsmen

**Editor's Note**—Last week, the NEWS reported results of a case brought before the National Labor Relations Board by a group of St. Paul, Minn. retailers to prevent the appliance servicemen in two of their stores from being represented by one union and most of their other employees in all stores being represented by another.

They argued that if appliance servicemen were to bargain separately, then one union should bargain for the servicemen in all member stores.

The NLRB denied the employers' petition, pointing out that while servicemen are skilled workmen they are not skilled craftsmen and therefore would not constitute appropriate separate units for collective bargaining.

The text of the NLRB decision and order follows:

UNITED STATES OF AMERICA  
BEFORE THE  
NATIONAL LABOR RELATIONS BOARD  
Case No. 18-RM-22

In the Matter of  
RETAIL EMPLOYEE RELATIONS  
COMMISSION

Employer and Petitioner  
and  
WAREHOUSE EMPLOYEES' UNION  
LOCAL NO. 503, A. F. L.

and  
RETAIL CLERKS' INTERNATIONAL  
ASSOCIATION,

by its Agent, RETAIL CLERKS'  
UNION, LOCAL NO. 2, A. F. L.

**DECISION and ORDER**  
Upon a petition duly filed, hearing in this case was held at St. Paul, Minn., on various dates from April 19, 1948 through May 24, 1948, before Max Rotenberg, hearing officer. The hearing officer's rulings made at the hearing are free from prejudicial error and are hereby affirmed. The motion made by Warehouse Employees' Union, Local No. 503, A. F. L., herein called Local 503, to dismiss the petition is granted for the reasons hereinafter stated.

Pursuant to the provisions of Section 3 (b) of the National Labor Relations Act, the board has delegated its powers in connection with this case to a three-man panel consisting of the undersigned board members.

Upon the entire record in this case, the board finds:

1. The Employer is an association of 26 retail stores in St. Paul, Minn. In the aggregate, the member stores annually purchase in excess of \$30,000,000 worth of goods of which more than 80% is purchased outside the State of Minnesota.

Only one member annually purchases less than \$100,000 worth of goods, of which 40% is purchased outside Minnesota. All the members make a small proportion of their sales outside Minnesota.

Upon the basis of the foregoing facts, we find that the Employer is engaged in commerce within the meaning of the National Labor Relations Act.

2. The labor organizations involved herein claim to represent employees of the Employer.

3. No question affecting commerce exists concerning the representation of employees of the Employer, within the meaning of Section 9 (c) (1) and Section 2 (6) and (7) of the act, for the following reasons: Local 503 seeks to represent separate units of appliance servicemen employed in two of the Employer's member stores.<sup>1</sup> Retail Clerks International Association, by its agent, Retail Clerks' Union, Local No. 2, A. F. L., herein called the Retail Clerks, agrees with Local 503 that such units are appropriate.

The Employer contends that such units are inappropriate because of a history of bargaining covering the employees in a broader unit on an association-wide basis; it urges that only the existing unit, or, in the alternative, an association-wide unit of the appliance servicemen, is appropriate.

In May, 1936, the principal department and specialty stores in the downtown area of St. Paul formed an employer organization for the purpose of establishing minimum wages, hours of labor, and other conditions of employment in the member stores.

The organization came to be known as the Retail Employee Relations Commission, herein called the Employer. Since 1937, the Employer has negotiated labor contracts for its members. The contracts have uniformly been signed by the individual members, as well as by the Employer and the contracting Unions.

The Employer has power under both its own bylaws and Minnesota law<sup>2</sup> to enforce compliance by its members with the terms of labor contracts negotiated by the Employer and executed by it and its members.

Although power in an employer association to bind its members is not always regarded as a criterion necessary to the finding of a multi-employer unit,<sup>3</sup> it is clear that here the Employer possesses sufficient authority to engage in collective bargaining on behalf of its members to be deemed an employer within the meaning of the act.<sup>4</sup>

In 1937, the Employer voluntarily recognized the Retail Clerks, and since then has bargained with it for an over-all unit of employees of member stores, always excepting certain specifically excluded groups of employees, principally recognized crafts.

In none of the contracts signed by the Employer, its members, and the Retail Clerks, over the 10-year period from 1937 to 1947, were appliance servicemen specifically excluded. They were specifically included in the 1947 contract, which expired on May 1, 1948.

In December, 1947, and March, 1948,

Local 503 notified two of the Employer's members<sup>5</sup> that it claimed to represent appliance servicemen in their two stores.

In March, 1948, the Retail Clerks notified the Employer that it did not wish to represent appliance servicemen. The Employer thereafter, on March 29, 1948, filed the petition in this case.

Appliance servicemen are employed in eight of the member stores. They service radios, refrigerators, washing machines, and minor appliances, and make minor repairs.

In each of these eight member stores, they are hired by the regular personnel office, and they are under the same supervision, at a relatively low level of management, as appliance salesmen and, in some stores, as salespeople in other departments.

They are on the same pay roll with, and their hours and working conditions are similar to those of, other employees.<sup>6</sup> They are skilled workmen, but the degree of skill required to work on the different appliances varies.

The record indicates that a minimum of six months' training or experience is necessary to work on stoves, the simplest of the appliances, whereas several years of experience may be necessary in the case of refrigerator repairmen.

But there is no standard, recognized training, or apprenticeship period for appliance servicemen. They do not qualify as journeymen electricians or machinists, so as properly to constitute a recognized craft.

As they are not skilled craftsmen, and as they have in fact received the benefits of the contract covering the over-all unit indicated above, we find that they would not constitute appropriate separate units for collective bargaining.

The Employer's petition will therefore be dismissed, these employees being the only ones involved in the claim for recognition upon which the petition is based.

### ORDER

IT IS HEREBY ORDERED that the petition herein be, and it hereby is, dismissed.

Signed at Washington, D. C., this 28th day of December, 1948.

Paul M. Herzog, Chairman  
James J. Reynolds Jr., Member  
J. Copeland Gray, Member

NATIONAL LABOR RELATIONS BOARD  
(SEAL)

<sup>1</sup>The Golden Rule and The Emporium.  
<sup>2</sup>Chapter 292, Laws of 1935 of the State of Minnesota.

<sup>3</sup>Matter of Rayonier, Inc., 52 N. L. R. B. 1,269; Matter of George F. Carleton Co., 54 N. L. R. B. 22.

<sup>4</sup>Cl. Matter of Cloth Laying Appliances Corp. and/or Cutting Room Appliance Corp., 78 N. L. R. B. 785.

<sup>5</sup>See footnote 1, supra.

<sup>6</sup>Matter of Montgomery Ward & Co., Inc., 78 N. L. R. B. 1,070; Matter of Sears, Roebuck & Co., 66 N. L. R. B. 285.

## Cooled Candy Sells

Whitman Finds Retailer's Sales Go Up 100-600%  
When Refrigerated Cases Are Installed

PHILADELPHIA—Much of the increased sales of Stephen F. Whitman & Sons, Inc., manufacturer of packaged candy, have been attributed to the use of refrigerated showcases.

Louis L. McInhenney, president of Whitman's, reports "the effect of these showcases has been to revolutionize the candy business of the retailer, increasing his sales, almost without exception, from 100% to 600%."

One of the biggest marketing problems candy manufacturers have had to cope with is the perishable nature of the product, it was noted. Candy is effected by heat, light, air and moisture. Each year the industry absorbs millions of dollars in losses resulting from damaged or unsalable candy.

As early as 1937, Whitman's began to work on the problem of providing showcases for its dealers. Although

progress was interrupted during the war, Whitman's cooperated during the emergency period with General Electric Co. on the project.

In 1946, at the cost of \$5,000,000, Whitman's underwrote production of 10,000 refrigerated showcases by General Electric. The refrigerated cases first appeared in stores throughout the nation in the spring of 1947.

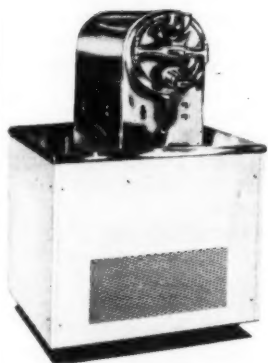
Since then, Whitman's has installed more than 7,000 showcases in dealers' stores.

The effect of the refrigerated showcase has been to level out the seasonal demand for candy which has long been peculiar to the industry.

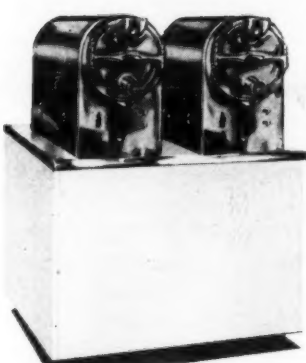
Instead of the usual summer slump in sales, Whitman's has enjoyed remarkable sales increases, particularly in summer resort areas, the company reported.



*New*  
**TAYLOR FREEZER**  
**COVERS ALL MARKETS**  
**100%**



Single-head models in 6, 10, and 20-qt. sizes with self-contained compressors. 70-gallon hardening cabinet available for use with these models on separate or same compressor.



Twin heads available in 6, 10, or 20-qt. sizes. Ideal for continuous service direct from freezer; always one head to serve from. Permits serving two flavors. Fast volume production for ice-cream or custard.



The famous 610R. Complete ice-cream department; freezing, hardening, dispensing in one unit with self-contained compressor. Ready to operate. Only unit of its kind—no competition.



Combination units with 10 or 20-qt. freezer, 40 or 60-gallon hardening cabinet with 20 gallons mix space. Write for information on complete line.

**MANY  
MORE  
MODELS**

**MAKES ICE-CREAM WITH 100% OVERRUN—  
AND FREEZES COLD AND STIFF FOR  
SERVING DIRECT FROM FREEZER**

Why lose half your market by selling a custard freezer that can't make ice-cream or an ice-cream freezer that can't make frozen custard? The new Taylor Freezer does both! Gives you complete coverage of all markets. Gives your customers a machine that offers them more opportunities to profit by selling all frozen desserts and meeting customer preferences. More sales and profits for both you and your customer!

Taylor's new design for forty-nine includes these big advantages: Fast ejection even at low temperatures for Frozen Custard. Highest possible overrun for temperature desired. Entirely new and different beater design. Improved, accurate, trouble-free automatic controls. Smooth, quiet operation. Sturdy construction for continuous service. The best freezer to buy—therefore the best freezer to sell!

**HOW TO MAKE FORTY-NINE  
YOUR MOST PROFITABLE YEAR**

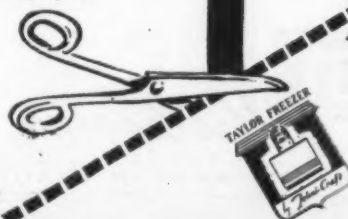
Are you satisfied with last year's profits? Or did some lines "let you down?" Taylor Freezer offers you an additional line—with the wide market and margin you need—that will boost your profits. Enjoy the complete market coverage and maximum discount of the freezer that outsells all others combined. Capitalize on the sales possibilities of the freezer backed by the most powerful advertising in the industry. Sell the freezer that gives you the biggest profit!



**DISTRIBUTORS, DEALERS, SALESMEN!**

Look into the sales and profit possibilities of the new Taylor Freezers. Write us for full information. Your territory may be open for a distributor, dealer, or salesman. If it is, you may find this just the opportunity you are looking for to make 1949 your biggest year.

**TEKNI-CRAFT**  
BELOIT, WISCONSIN



TEKNI-CRAFT  
Beloit, Wisconsin

Please send me more information on the possibilities of Taylor Freezers. I am attaching an outline of the territory I cover and information on my organization.

NAME ADDRESS CITY and ZONE STATE ACN



# Sell Tarvic

FOR  
**DISPLAY CABINETS • ICE MAKERS  
 BEVERAGE COOLERS • WALK-INS  
 QUICKFREEZERS • MILK COOLERS**

WRITE  
**VICTOR PRODUCTS CORP., HAGERSTOWN, MD.**



On the Job . . . DAY and NIGHT . . . Dependable

**MANHATTAN WHIPCORD FHP V-BELTS**

For Refrigeration and Air Conditioning Equipment, stock and replace with Manhattan Whipcord FHP V-Belts; Condor V-Belts on heavy duty multiple drives. Cool Running — Quiet — Non-Slip — Minimum Stretch — Longer Lasting



**RAYBESTOS-MANHATTAN INC.**

*Distributors Everywhere*

MANHATTAN RUBBER DIVISION

PASSAIC, NEW JERSEY

## Reg. W Effect on Sales Of Vacuum Cleaners and Accessories Explained

WASHINGTON, D. C.—Official interpretations of how Regulation W affects instalment sales of vacuum cleaners involving accessories or a "junior" hand vacuum cleaner have been prepared as follows:

"In the case of a vacuum or suction cleaner having attachments which are all dependent upon a single power unit for their operation and use, it is the Board's view that such attachments are 'accessories' within the meaning of section 8(h) (7), if the vacuum cleaner (or power unit) and dependent attachments are sold at or about the same time.

"Thus, if the total price, including the cost of the attachments, is \$50 or more, the regulation applies; but if the total price is less than \$50 because the customer does not buy the attachments, then the regulation would not apply.

"On the other hand, if an upright brush-type vacuum cleaner, for example, is sold together with an independently powered and operated hand or 'junior' vacuum cleaner at a combination price, then the transaction would fall within section 6(h) of the regulation.

"Of course, if each were sold on the basis of their individual prices, without reduction, the fact that the two were bought at or about the same time would not bring the transaction under section 6(h), nor would the hand vacuum cleaner ordinarily be considered 'an accessory' under section 8(h) (7)."

## Promoted by Condensing Unit Manufacturer



L. W. LARSEN

D. J. BOWEN

F. G. PURCELL



P. G. COLGROVE



H. M. KELSO

In new executive promotions and appointments announced by Tecumseh Products Co., Purcell becomes assistant general manager; Larsen is named sales manager; Bowen, western sales manager; Colgrove eastern sales manager; and Kelso is service sales manager.

## Tecumseh Changes--

(Concluded from Page 1, Column 4)  
 manager of Blissfield Mfg. Co., will be the new assistant sales managers of the western and eastern divisions, respectively.

Frank K. Smith, director of sales for Tecumseh, continues on a temporary leave of absence.

R. H. Hanna, former assistant to manager of the sales order department. Kenneth Davison, who has been engaged in cost, sales analysis, and sales reports, will be the new assistant manager of the order department.

J. K. Touborg, director of engineering, has departmentalized the activities of this department and has appointed four new chief departmental engineers to head up the divisions as follows:

R. A. Preston becomes chief design engineer; H. R. Andrews is named chief application engineer; J. R. Elliott, chief laboratory and test engineer; and C. M. Knudson, chief production engineer. All of the above have been on the engineering staff of Tecumseh Products Co. for some years, with the exception of Knudson, who was formerly with Universal Cooler Corp.

Harold M. Kelso retains his position as service sales manager.

A new post of business manager of the refrigeration sales and engineering division has been created, and will be filled by E. C. Boss, who has been auditor of the sales and engineering departments for several

years. Boss is disposing of his accounting business in Detroit.

General purpose of this new executive personnel setup, Brown said, is to relieve the department heads of as much detail as possible so that they may have more time to devote to customer problems, product development, and sales promotion activities.

## Freez-O-Matic Jr. Price Reduced \$10

BROOKLYN—Acme National Refrigeration Co. here has announced a reduction in price of its 1949 formica top Freez-O-Matic Jr. This table-top refrigerator which formerly sold at \$199.50 is to be retailed at \$189.50, effective immediately.

Sidney Spielman, president of the company, said that expanded manufacturing facilities and increased production have made possible savings reflected in the retail price cut.

## Hussmann Purchases Canadian Case Mfr.

ST. LOUIS—Hussmann Refrigeration, Inc. manufacturer of all types of commercial refrigerators, has announced the purchase of all the outstanding capital stock of the Ruddy Freeborn Co., Ltd., of Brantford, Ontario.

The Ruddy Freeborn Co. has been engaged in business for many years and is believed to be the largest manufacturer of commercial refrigerators in Canada.

# SCOOP

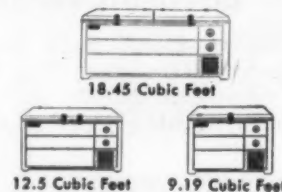
your freezer market with America's finest

## The new 1949 BEN-HUR

### FARM and HOME FREEZERS

Styled by BROOKS STEVENS, Nationally-Known Industrial Designer

## THREE Popular Models



Check Them All . . . And you'll choose the complete BEN-HUR line.

Greater than ever before, new 1949 BEN-HUR Farm and Home Freezers are built for new leadership in beauty, design, engineering and performance . . . Today's most exciting selling combination in modern freezers. Prove this yourself by checking the NEW features — plus the many time-proven Ben-Hur features that combine to make BEN-HUR the top value in home freezers.

**BEN-HUR MFG. COMPANY**  
 Dept. AC, 634 East Keefe Avenue, Milwaukee 12, Wisconsin



**BEN-HUR FARM and HOME FREEZERS**

## HERE ARE THE NEW KEROTEST VALVES YOU ASKED FOR..!

Your demand has been our command . . . and here are five of the new KEROTEST Valves that will give you still more of the characteristics you look for most in valves. More compactness . . . greater ease of installation . . . fuller efficiency . . . and greater dependability and service than ever . . . with economy. For the finest and newest in refrigeration and air conditioning valves . . . see your KEROTEST Wholesaler.

See your **KEROTEST** Wholesaler

KEROTEST MANUFACTURING CO.  
 PITTSBURGH, PA.

AMERICA'S FIRST NAME IN QUALITY VALVES



# What Are Prospects for Selling Refrigerators, Home Appliances In 1949?

## Return to Pre-War Refrigerator Buying Pattern Indicates Growing Competition

CHICAGO—Continued high sales levels with totals approaching if possibly not matching those of 1948, a return to seasonal sales patterns, and much more in the way of factory sales promotion efforts.

That's the ticket for 1949 as seen by a representative panel of major appliance manufacturers, who answered questions at a press conference held at the Merchandise Mart during the Winter Home Furnishings Market. The appliance men participating in the conference were William C. Conley, Jr., Coolerator Corp.; Harry Parsons, Landers, Frary & Clark; and C. M. Dunn, Estate Stove Co.

Conley pictured the situation on refrigerators like this:

1948—5 million sold. 1949—good chance for 4-to-5 million.

There are some 25 million mechanical refrigerators in use, but a great many of these are more than 10 years old. Because people have come to "live out of the refrigerator," refrigerators are getting greater use today (possibly up to 100 door openings daily as compared with 6 to 10 in the early days of the refrigerator), tending to wear them out at a faster rate.

There was a sales slump in the last quarter, indicating a return to the seasonal pattern of pre-war years. Before the war, refrigerator sales by quarters followed this pattern:

First quarter .....	25%
Second quarter .....	45%
Third quarter .....	20%
Fourth quarter .....	10%

Another reason for the fourth quarter slump was that wholesalers have become inventory minded, since there are now taxes on inventories held at the end of the year. Very few wholesalers would take any ship-

ments after the first part of December.

On home freezers—800,000 is probable figure for 1948, and 1949 should equal or better it. Conley believes there will be a trend to larger sizes in freezers, because the greatest food savings can be shown with the larger models.

Electric range sales—while they'll only show an increase of 100,000 or so for 1948 over 1947, Parsons believes the upward trend will continue in 1949.

Small appliances—While there has seemed to be a considerable softening of demand for some small appliances, Parsons pointed out that it was pretty difficult to make any predictions.

Flatirons, for example, seemed to be clogging up retailer's shelves for a while during 1948, but then all of a sudden they were out of supply.

Prices—As matters stand now, not much of a trend in either direction. Conley pointed out that there is little prospect in sight for decreases in material or labor cost, without which manufacturers can't cut prices without taking a loss. Parsons presented the following figures to bear out his contention that range prices are not out of line:

Present electric range prices, on the average, are:

- 7½% over January, 1948.
- 52% above V-J Day prices.
- 77% over January, 1940 prices.

In the meantime the national income figure has risen from an index figure of 81.3% to 202.5%.

Promotion—A great step-up of sales promotion activity on the part of manufacturers. However, Parsons doesn't believe 1949 will see the return of the day when a manufacturer had a factory representative in every department store.

## Care In Management and Financing Will Be Required of Dealers In '49

By C. T. Lawson, Vice President in Charge of Kelvinator Sales, Nash-Kelvinator Corp.

The reappearance of the seasonal factor in appliance sales during the last quarter of 1948 is an important warning signal to the appliance industry that the first easy selling days of the postwar era are past. It brings manufacturer and retailer face to face with the problem of how to operate successfully under the conditions imposed by a buyer's market—conditions complicated by the rapid increase in recent years in the number of appliance dealers.

In October, 1948, the U. S. Department of Commerce issued a report on the outlook for the electrical appliance industry. That report contained figures showing the trend, over recent years, of the number of electrical appliance retailers, and for comparison, the trend over recent years of the number of all retail stores. Comparing 1947 with 1941, the figures show that the number of electrical appliance retailers increased 58%, as against only 9% for all retail stores.

Further, the report has in it the following two significant statements: "The consensus among the trade is that there are too many dealers in the electrical appliance business today, many of whom are new, with little knowledge of selling methods and whose experience thus far has consisted of apportioning merchandise to a waiting list."

"It is very probably true that there are too many dealers today, and that the months ahead will see the elimination of many stores that are financially weak or poorly operated."

Recognizing the situation, some dealers will retire voluntarily with their capital and earnings intact. However, the ones that will cause the most trouble are those who will attempt to continue, month after month, operating at a loss until their over-all capital structure is impaired.

Under such circumstances, dealers who may be liquidating merchandise at some time in the future may resort to unsound business practices, creat-

ing definite problems for the well-established dealer. This is a danger point in the years ahead, and is one that is going to call for level-headedness and sound management on the part of the veteran retailer.

Management of a retail operation today, as contrasted with pre-war days, calls for a far greater agility and ability to change one's plans to meet unexpected situations. There was a time when a retailer in any business could lay out a plan of operation for a 12-month period and then follow that plan through to completion. Today changes in the international picture, changes in the economic picture, can have an immediate effect on business.

However, there seem to be some basic suggestions which should be helpful, and if heeded can save many a business from financial disaster:

1. Capital invested in hard-to-move inventory places a burden on the business, and its liquidation usually results in a small profit or even a loss to the dealer.

2. The dealer should not attempt to carry his retail paper himself unless he has funds or access to funds in an amount sufficient to finance this paper without impairing his normal business requirements.

3. He should recognize it requires approximately twice the amount of capital to do the same unit volume today as compared with pre-war. Further, depending on the number of additional appliance lines he has taken on since the war, this could mean two, three, or four times as much capital as pre-war. If he doesn't have it, he must resign himself to a smaller volume or get additional permanent capital into the business. Many a dealer has and others will find their business choked off for the lack of operating funds.

4. Most enterprises during normal times will have sales peaks and valleys during the course of the year. To properly finance the peaks, short-term loans should be arranged to assure prompt payment of bills.

Make certain all bills are paid when due. Credit is a very valuable asset. It cannot be bought and the dealer is the only one who can build or destroy it. Some day it will serve him well.

5. Encourage his customers to make substantial down payments and purchase on as short a contract as possible. Should there be a change in the general economic conditions affecting the paying habits of customers, the dealer may find himself trying to liquidate capital he was forced to invest in repossessed appliances.

6. He should avoid obligating himself to the purchase of new buildings, expensive leases, or renovation work at this time, unless he can afford to pay for a substantial part of it out of accumulated reserves.

No one today can foresee exactly what the selling conditions of the next six, eight, or 12 months will be. It is probable that with a high level of employment and a continuing high wage level, that the first six months of 1949 will be exceptionally good ones. But we are sure to find the buying public more selective in their choice of merchandise, more demanding in their requirements for quality features, and dependability in the products they buy.

This will require a peak managerial efficiency on the part of the retailer, both in protecting his financial position, and developing his sales organization to "create" sales while others sleep.

## New Home Construction, Replacing of Old Models Offers Big Refrigeration Market

By J. W. Craig, Vice President, Avco Mfg. Corp., General Manager, Crosley Div.

The household refrigeration industry will return to a competitive market in 1949.

The industry, with a production capacity of 7,000,000 units a year, has turned out 5,000,000 refrigerators in 1948, following a production total of 3,500,000 in 1947. The urgent consumer demand that existed after the war is rapidly being filled, but production is continuing at a high level.

The trend toward a competitive market such as we knew before the war should be regarded as a healthy situation for the refrigerator industry, or for any other industry, for that matter. Those of us who believe we have adequately prepared for this development welcome it. We are glad to get back more thoroughly to dependence on the quality of our product and the efficiency of our sales and advertising activities to gain the share of the market we feel we should have.

For we know that consumers here and abroad want and need millions of refrigerators. New home construction, the increase in the number of families, the heavy replacement market, and currently subnormal inventories of finished units combine to

make a potentially excellent market.

And we know that the public has the purchasing power to support this market when we see that 60,000,000 Americans are earning at a rate of \$215 billion a year, compared to \$78 billion in 1940 and that personal savings now approximate \$175 billion, 40% of which are held by families making \$5,000 and 20% by families making \$5,000 to \$7,500 a year.

We must have salesmen and sales methods capable of pointing out to consumers that quality household refrigerators are excellent investments. Compared with prewar prices, refrigerator prices have not increased in proportion to retail prices in general.

### REFRIGERATION UNITS WANTED

Desire to purchase ¼ to 1-HP Sealed or open type; standard brands; Complete condensing units; Give full details.

Box 3071, Air Conditioning & Refrigeration News

## Everybody's Pointing to HOTPOINT'S

It's The Hottest Advertising Story In Water Heater History... And Only Hotpoint Has It!

LOOK at the selling theme, look at the features and you'll say "No wonder Hotpoint is today's fastest-selling electric water heater!"

• BACKED BY A bang-up, year-'round advertising program, Hotpoint dealers everywhere are telling the story of amazing "Magic Circle Heat." Miniatures, cut-aways—all kinds of merchandising tools—help demonstrate and sell Hotpoint's famous Pressurized Calrod® Units, Automatic Thermostat, Fiberglas® insulation, 10-Year Protection Plan and many other features!

• MAGIC CIRCLE HEAT is one more reason why retailers everywhere are pointing to Hotpoint as the franchise with a future!

HOTPOINT INC. (A General Electric Affiliate), CHICAGO

# Magic Circle Heat

"Magic Circle Heat" sky-rockets sales of America's largest-selling water heater in market after market.



Everybody's Pointing To

# Hotpoint

RANGES • REFRIGERATORS • WATER HEATERS • FREEZERS • DISHWASHERS • DISPOSALS • SINKS CABINETS • CLOTHES WASHERS • DRYERS • IRONERS



### 3 Types of Refrigeration Provides a 'Distinct Novelty' for Small Community Let Small Town Bakery Stock Whipped Cream Item

ENGLEWOOD, Colo.—Incorporating three types of special-purpose refrigeration into a new retail bakery has made it possible for Arjen Russmann and John Jeck, owners of the Golden Brown Bakery here, to do 50% of their total sales volume in whipped cream specialties.

Realizing that whipped cream pies, cakes, eclairs, puffs, and other specialties would be a distinct novelty in this small community of 6,000, south of Denver, the two bakers planned for plenty of refrigeration facilities when setting up the new plant at 3499 S. Acoma St.

"We were fortunate in that our plant is housed in the same building with a frozen foods locker plant," Jeck explained.

"This meant that plenty of refrigeration was available at low cost, and that we would have ample storage room to keep large quantities of delicate whipped cream and other ingredients on hand."

Studying the success of other bakers with these items, Jeck determined that the usual drawback was insufficient refrigerated display space.

Therefore, he installed a 10-ft. display case, equipped with double-pane glass and a stepped up condensing unit to keep the interior at a steady 35° F. The refrigerated case is adequate to display a number of cakes, pies, trays of eclairs, ladyfingers, and other items, with six compartments below for reserve stocks of each.

When the case is emptied during rush hours, it is restocked from a two-compartment Tyler reach-in refrigerator which has been installed in the wall opposite.

Here, 20 trays of whipped cream specialties may be kept on hand right on the sales floor.

Salespeople in the bakery can sell from either of the two refrigerated display units according to the demand, but are instructed to fill up the display case from the Tyler box when time permits.

To meet the weekend rush, when as many as 2,500 cars park through the day on a huge municipally operated parking lot just across the street from the Golden Brown Bakery, whipped cream specialties are made up during the slack hours of the week, and are stored in a 10 x 8-ft. walk-in refrigerator in the basement.

This, kept at an even subzero temperature by ammonia coils from the locker plant, will accommodate large quantities of perishable whipped cream products. From here they move to the Tyler storage box on the sales floor, and from there into the display case.

Thus, there is always ample space to store enough whipped cream specialties to meet even the heaviest demand, and the bakery has never found it necessary to disappoint a single customer, according to the partners.



Above is a 10-ft. display case installed in the Golden Brown Bakery, Englewood, Colo. for merchandising whipped cream specialties. It is one of three installations planned to allow for handling perishable items.

### New Associate Members Join Underwriters' Lab

CHICAGO—A. C. Blackman, J. C. Rehard, and D. G. Vaughan have accepted the invitation extended by the executive committee of the board of trustees of Underwriters' Laboratories, Inc. to become members of the casualty council and associate members of the corporation.

Blackman serves as chief of the division of industrial safety, department of industrial relations of the state of California. Rehard is chief safety engineer, bureau of safety engineering, department of buildings and safety engineering of the city of Detroit. Vaughan is the manager of the engineering and inspection department, Aetna Casualty & Surety Co., Hartford, Conn.

The casualty council reviews the reports of investigations made by the Laboratories' engineers on devices, systems, and methods bearing upon individual accident and similar hazards.

### McQuay, Inc. Expands Stikeleather's Area

MINNEAPOLIS—H. Blake Thomas, sales manager of McQuay, Inc., manufacturer of refrigeration and air conditioning products, has announced that the territory served by Ted Stikeleather has been increased to include western New York, western Pennsylvania, Ohio, West Virginia, Kentucky, and the major portion of Indiana.

Stikeleather has represented McQuay in the Cincinnati trading area on refrigeration products since August, 1947.

### Refrigeration Engineers Move and Change Name

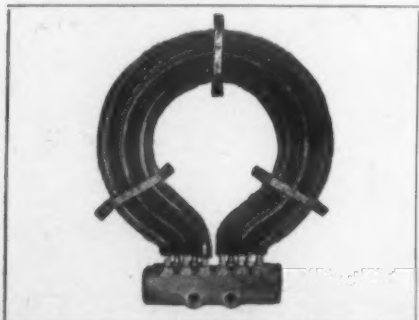
DETROIT—M & S Refrigeration Engineers here has announced that it has changed its name to Maksym Refrigeration Engineers, its address to 4404 Woodward Ave., and its telephone number to Temple 3-8010. Michael G. Maksym is president.

### Ziff Furniture & Appl. Forms

BUFFALO—Ziff Furniture & Appliance Co., Inc. has been incorporated here with capital of 200 shares. Incorporators of the new firm are Ira L. Powsner, Louis Perimuter, and Lillian Warren.

### ROME-CONDENSER

★ Jointless Type ★



Rome Water Cooled Condenser Coils insure trouble-free condensing equipment. Used by leading compressor manufacturers.

### ROME-TURNEY RADIATOR COMPANY

222 CANAL ST.  
ROME, N. Y.

"Gee, everybody's buying ice cream since we got Frigid-Freeze cabinets!"

YEAR 'ROUND  
Ice Cream  
IT'S DELICIOUS

A Leader in the Industry



**Surprising Side-Effect****Self-Serve Ice Cream Display Case Installed To Save Time, Winds Up Moving More Expensive Brands**

SAN DIEGO, Calif.—By switching from ordinary service methods of selling ice cream to use of an eye-appealing, self-service refrigerated display, Ace Drugstore here has increased its volume 28%, according to Don Perkins, owner of the store.

Cramped for space, Perkins set out to find a self-service box which would fit into a space only 4 ft. wide by 3 ft. deep. Eventually, he located a mirror-backed variety which he thought would attract the customer's attention to brightly-packaged ice cream.

"The results have been incredible," Perkins said. "It took us only 90 days to increase the sale of our standard grade ice cream by 28%. At the same time, sales of top-quality, ice cream rose 50%.

"We are also selling 25% more ice cream rolls, at 69 cents, a specialty

which shows a longer profit, than any other ice cream item. Moreover, by selling more ice cream, we have also increased sales of sirups by more than 50%.

Perkins has discovered that whereas many customers in the past would forego buying ice cream when fountain girls were busy, they now serve themselves. Therefore, all package ice cream is now displayed and sold here but bulk is packed on request.

"Perhaps the most surprising feature of the open display and self-service refrigerator is the fact that most customers are buying the more expensive variety, when displayed side by side with standard grades containing less butter fat," Perkins commented. "This was a surprise, since more customers took the cheaper package at the fountain rail."

**Schade Bids for Refrigerated Truck Business In Arizona**

PHOENIX, Ariz.—The Schade Transfer Co. here has applied to the Arizona Corporation Commission for permission to supply refrigerated truck service throughout the state.

Wilson T. Wright, chairman of the commission, pointed out that the application could not be approved until existing companies operating over the routes for which Schade has applied have been given an opportunity to improve their service.

He gave seven trucking firms 60 days in which to provide refrigerated service or face Schade's competition.

**Bushfield Heads Perfection's Range & Heater Division Sales**

CLEVELAND—C. H. Foulds, Perfection Stove Co. vice president in charge of sales, has announced the appointment of L. Bushfield as sales manager of the company's range and heater division.

**Allegheny Ludlum Co. Cuts Prices on Some Stainless Steel Extras**

PITTSBURGH—Revisions downward in some price extras of stainless steel products manufactured by Allegheny Ludlum Steel Corp. were announced recently by Russell M. Allen, vice president in charge of sales.

Quantity extras were reduced from 5½ cents to 1½ cents per lb., depending upon size of the individual order. This reduction included all grades of all products except stainless tubes and castings.

Stainless steel sheet gauge extras also were reduced in some instances. Gauges 23 to 26 inclusive were reduced by 2 cents per lb. and gauges 21 and 22 were reduced by 1 cent per lb. Simultaneously, a slight reduction in packaging extras for stainless steel strip was announced.

Reductions are effective immediately.

**Miller Becomes Factory Mgr. for Deepfreeze Div.**

NORTH CHICAGO—The appointment of Seth R. Miller as factory manager of Deepfreeze Div., Motor Products Corp., has been announced by G. H. Smith, vice president and general manager.

Miller has been master mechanic for Motors Products Corp., in Detroit, since June, 1947.

Prior to his appointment with the parent organization, he was master mechanic at Deepfreeze Div. He started with the division in 1944, and helped organize it in its early months.

Miller succeeds James M. Baker.

**Knoxville Appliance Sales Show Decrease**

KNOXVILLE, Tenn.—Waste disposal units, dishwashers, and water heaters were the only major appliances to show gains in October as compared with September, the Knoxville Utilities Board reported recently from statistics compiled from 23 local dealers.

Range sales were off slightly while refrigerators fell 15%, freezers 25%, ironers 36%, and washing machines 71%.

The utility's summary of dealers sales for the month is as follows:

Appliance	No. of Units	Value
Home Freezers	3	\$ 1,530
Refrigerators	152	42,884
Ranges	156	39,844
Water Heaters	73	9,804
Dishwashers	6	1,900
Waste Disposal Units	12	2,499
Washing Machines	104	17,720
Ironers	12	2,019

**Firm's New Method Alloys Steel Parts with Chrome**

NEW YORK CITY—A new process that is claimed to produce materials similar to stainless steel by alloying ordinary steel surfaces with chrome has been introduced in this country by Fusion Alloys Corp. here.

Metals treated by this low cost British process, it is said, possess greater resistance to corrosion, wear, and high temperatures.

According to Alexander Berger, vice president of Fusion Alloys, the process consists of a means of packing steel parts in conventional boxes used for carburizing and filled with a powder of chromium-rich content.

He said that after heating for a period of time at 1,850° F., the parts obtain a chromized layer. Dimensions are not affected, he noted. He asserted that diffused chromium content can be controlled to depths from .0005 to .0025 in.

The treated metal, he said, takes on the appearance of stainless steel.

The company is currently in the process of installing a pilot plant near here in which to use the process, he declared.

"That's a fact...  
and our sales figures  
prove it..."

Hard headed retailers who have a healthy respect for a dollar... are showing new interest in ice cream sales... and in FRIGID-FREEZE cabinets that stimulate buying. Get aboard the rising sales curve with FRIGID-FREEZE equipment: the record-smashing open-top "Spot-Special" with VitaVision, the large capacity glass top models for mass display and storage, and the durable line of standard cabinets that meet the most rigid requirements of the industry.

**Frigid-Freeze**

REFRIGERATION CORPORATION OF AMERICA  
NEWARK 5, NEW JERSEY • A DIVISION OF NOMA ELECTRIC CORPORATION

**PLAYSAFE**  
USE  
CHICAGO SEALS  
and  
VALVE PLATES

Precision lapping, superior construction and simple installation make Chicago seals ideal for replacement.

Only Chicago valve plates have replaceable seats.

CHICAGO SEAL CO.  
322 S. HOBBS AVE. CHICAGO 12, ILL.



## What Was New at the Mart

Some high spots on the new products and company policy announcements that came out of the Winter Homefurnishings Market were covered in the Jan. 10 issue of the NEWS, but space and time limitations prevented complete coverage.

The round-up on these items from the mart is completed on these two pages. A report on the Housewares Show, which opens Jan. 13, will be carried in a later issue.

### Marquette Introducing a 9-Cu. Ft. Refrigerator

Being introduced by Marquette Appliances, Inc., Minneapolis, was a 9-cu. ft. household refrigerator. A company representative said this refrigerator would go into production in about six weeks. It is scheduled to be manufactured in both standard and deluxe models.

Also on display in Marquette's showroom was a 7.5-cu. ft. household refrigerator which lists at \$239 f.o.b. St. Cloud, Minn., and home freezers of 4, 8, and 16-cu. ft. capacities. The freezers are priced at \$208, \$325, and \$498, respectively.

### G-E Is Emphasizing 'Live Display' Units

A spokesman for General Electric Co. said all its 1949 refrigerators and ranges had been introduced earlier. The refrigerator line includes one 6-cu. ft. model, four 8-cu. ft. models, and three 10-cu. ft. models. Six models comprise the range line.

"Live" G-E displays included a "waltzing" range and one calling attention to the capacities of the company's 4 and 8-cu. ft. home freez-

ers. In the latter display, an imitation derrick raised and lowered baskets of frozen food cartons to and from two freezers placed back to back.

The waltzing pushbutton range moved about on a low platform, its oven doors opening and closing continuously. Illuminated ovens helped center attention on the display.

### Ben-Hur Freezers Have Modern Styling, Color

Among the new farm and home freezers shown for the first time were the newly-designed 9, 12½, and 18-cu. ft. models comprising Ben-Hur's 1949 line. Fronts of the cabinets, styled by Brooks Stevens, industrial designer, feature vertical and horizontal indented lines. Breaker strip and some of the trim are in blue, making an innovation in the use of colors in freezers.

Other features of the line include new cold control and temperature indicator dials, Lucite handles, improved counter-balanced hinges, and new wire food baskets and dividers as standard equipment. Available as extra equipment are ice cube trays (two single-type trays, two double-

size trays with a capacity of 126 ice cubes) and carrying rack, an automatic alarm system, and special locks.

Of patented design and construction, the cold control is so built that children cannot tamper with it, according to Ben-Hur. The company explained that the edge of a coin must be inserted if it is necessary to adjust the control in the home.

A five-year warranty on the condensing unit and a one-year warranty on component parts are offered free of charge.

Covers on the 9 and 12½-cu. ft. freezers are one-piece; the 18-cu. ft. model has two lids. Dual latches are a feature of the 12½-cu. ft. model. All models have separate freezing compartments. Capacities range from 450 to 900 lbs. of frozen foods.

Volume production of the Ben-Hur line is expected in February, when distributors and dealers will begin receiving shipments, according to A. B. Bechaud, vice president in charge of sales.

### Sanitary Offers \$149.77 Home Freezer Model

Also being given their initial showing were two chest-type home freezers manufactured by Sanitary Refrigerator Co. They are model 39, a 3-cu. ft. freezer with a suggested list price of \$149.77, and model 69, a 6-cu. ft. unit with a suggested list of \$193.42. Equipped with Tecumseh hermetics, both freezers are now in limited production, with full production expected by March.

Sanitary also announced that design improvements have been made in its 4 and 6-cu. ft. refrigerators. These models, which formerly used fan-cooled condensers, are now pro-



Vertical and horizontal indented lines mark the cabinet-front design of the newly-styled Ben-Hur farm and home freezers which were introduced at the winter marts. Breaker strips and gaskets are in blue. The 12.5-cu. ft. model shown here has dual latches with Lucite handle and new one-piece cover. The line also includes 9 and 18-cu. ft. models.

vided with Tecumseh compressors and static condensers. Suggested list prices of these boxes were given as \$175.20 and \$195.37.

### Apex Showing New Washers and a Dryer

Making their bow in Apex Electrical Mfg. Co.'s space were two models of the Apex automatic clothes washer ("Wash-a-Matic"), an automatic clothes dryer, and the "Dish-a-Matic" dishwasher and sink.

The two clothes washer models are the "Standard" and the "Special." The Standard is said to have all the features of the DeLuxe model (recently introduced in the New York City, Newark, and Cleveland markets) except the lighted interior and the safety lid. The Special is semi-automatic, with the wash-rinse-spin-fluff cycle controlled by a foot pedal.

Prices of the Standard and Special have been established as \$299.75 and \$199.75, respectively. The DeLuxe sells for \$339.75. DeLuxe and Standard models are now offered with a five-year warranty on the drive-transmission, from the date of purchase by the original user.

The clothes dryer reportedly features radiant electric heating, smooth tumbling action, and a large front opening. It is claimed to thoroughly dry a full Wash-a-Matic load in 35 to 45 minutes.

The Dish-a-Matic sink has a stainless steel top with porcelain sink and work surface. It is 48 in. wide, 25 in. deep, and 36 in. high. The dishwasher is made with a built-in hot water tank which boosts tap water to pasteurizing temperatures.

A. C. Scott, vice president in charge of sales, said the company is launching a nationwide sales drive to be sustained through 1949.

### Laundrall Washer Has New Drive Mechanism

First public showing of a new and improved Laundrall, with major design and mechanical changes and a faster and more complete washing cycle, is being staged by F. L. Jacobs Co. at the American Furniture Mart here.

The new Laundrall features console styling by George W. Walker, industrial designer, and an "Electro-Cycle" drive designed to provide improved washing qualities and to reduce wear and tear in the handling.

Outside appearance of the automatic home laundry has been changed by redesigning the control panel and its starting switch, safety door handle, and water temperature control.

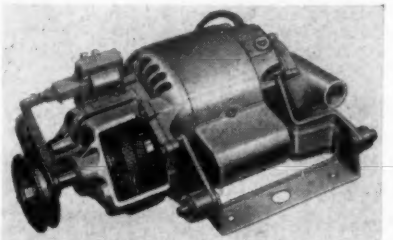
Inside, several major mechanical changes have been made in the power unit. The three parts of this unit, consisting of the transmission, motor, and pump, have been built as an

integral one-piece unit. Formerly, the pump and transmission were made as one unit, and the motor as a separate unit.

"The entire power unit is readily accessible and easily removed by merely taking off the front panel, loosening two mounting bolts, and



New "Laundrall" automatic washer with newly-styled exterior.



ElectroCycle drive for the Laundrall consists of transmission (left), motor (center), and pump (right) built as an integral one-piece unit.

disconnecting the wiring cable and drain hoses," the manufacturer said.

"The new machine is operated by means of an electric timer which controls the completely automatic cycle of operation. Formerly, the cycle was controlled by a series of gears and cams in the transmission.

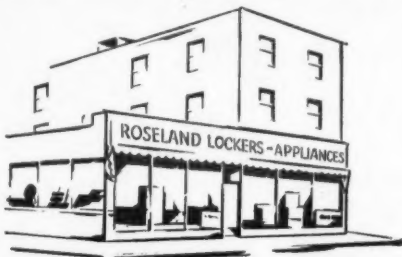
"The electric timer also automatically controls the reversing action of both the motor and the clothes cylinder, with the motor itself changing its direction of rotation. This was previously controlled by gear, cam, and clutch action in the transmission.

"In addition to these mechanical changes, several improvements have been made in the Laundrall's washing cycle. Chief among these is the addition of a 2-gal. spray rinse to eliminate soapy water between the wash and rinse period.

"Despite this addition, time for completion of the washing cycle has been shortened by 4 minutes. The complete cycle, consisting of wash, spray rinse, two deep rinses, and the final spin dry, now requires only 36 minutes instead of 40."

## Roseland Lockers, Chicago hit the jackpot selling . . .

# PHILCO FREEZERS



"Every Philco Freezer we sell brings profits 3 ways —(1) from the freezers themselves; (2) from increased sales of packages of frozen foods; (3) from new business in processing."

Says JOSEPH ECKEREN, Mgr.

◀ Here, Roseland Manager Joseph Ecker is shown giving a Philco Freezer demonstration to two interested customers. Pointing to the patented Philco 3-compartment design he explains how this makes large quantities of foods easier to arrange and keep orderly—a feature that wins the feminine vote every time.

### PHILCO AH-51 5 Cubic Feet

- Patented 3-compartment design.
- Extremely cold center compartment—as low as 15° below zero.
- Counterbalanced lid.
- Built-in lid lock.
- Temperature Control and outside Thermometer.
- Guardian Bell, battery operated.

## PHILCO

*Famous for Quality the World Over*

YES, experience proves it! The profits *really* begin to pile up for wide awake locker operators *after* the sale of a Philco Freezer. That's when a customer gets the frozen food habit—uses more, buys more—often rents *additional* locker space. And a Philco has the extra sales appeal, the sell-on-sight features and conveniences that make customers say "yes". Counter-height design, generous capacity, smart appearance and dependable, care-free, automatic operation—all combine to make it the ideal home freezer. It's the quality freezer you can sell with confidence. Write for information about this profit opportunity to — Philco Corporation, Philadelphia 34, Pennsylvania.



Coolerator now has a permanent exhibit at the Merchandise Mart in Chicago, manned at all times, and these new models in Coolerator's 1949 line were on display there during the winter markets. Striking use of color and lighting effects mark the display space.



## Plenty of Room In Frigidaire's Imperial

Demonstrating the extent of the storage space in Frigidaire's two-door "Coldwall" Imperial 10 model, Joyce Thoresen, "Miss Photo Flash of 1948," perches in the normal refrigerator storage compartment and even invites a companion to join her.



## Frigidaire Plans No Line Changes at Present

"To maintain high production levels over the coming months, Frigidaire will not make any major changes at this time in its present appliance line," stated P. M. Bratten, Frigidaire general sales manager, at the opening of the mart.

Noting that the line was the most extensive in Frigidaire's history, Bratten declared that "during the past 12 months, we have produced a greater variety and number of products than ever before. Our field organization is being strengthened to sell this broadened line. The line includes nine refrigerators of three different types, seven electric ranges, an automatic washer, electric clothes dryer, ironer, water heaters, home freezers, a dehumidifier, kitchen cabinets, and sinks.

## Roberts & Manders Has New Range Models

Roberts & Manders Corp. was showing a new apartment house range model, with three 7-heat burners, one of which was the large size. This model has a 20-in. oven. The deluxe model electric range in the Roberts & Manders line now has an appliance outlet that is controllable by the range timer. Also in the line is a combination electric range and coal stove.

## Gibson Offers Special Freezer Sales Plan

In addition to exhibiting the six refrigerators (four 8-cu. ft. and two 9-cu. ft. models), four ranges, and 7-cu. ft. upright home freezer introduced in October, Gibson displayed a 15.1-cu. ft. chest-type freezer on which deliveries are now being made. This all-white freezer is powered by a 1/4-hp. condensing unit and is equipped with four wire baskets and dividers.

At the mart, this freezer was used to attract attention to the "Gibson frozen foods plan for every day of the week." The freezer was loaded with large packages labeled Monday, Tuesday, Wednesday, etc., each package containing frozen foods for breakfast, lunch, and dinner. Accord-

ing to a Gibson representative, the company is attempting to promote the idea with frozen food packers.

Visitors to the Gibson showroom also saw two new ranges, models ER-199A and ER-199C, which are scheduled to be in production in mid-February. Prices were announced as \$199.95 and \$239.95. The current model ER-198B range is to be discontinued, it was stated.

## Deepfreeze Shows New 6-Cu. Ft. Models

Visitors to the Deepfreeze space in the Merchandise Mart were seeing the first exhibit of the Frostair duplex refrigerator, since it has become a part of the Deepfreeze line. The Frostair offers 7 cu. ft. of normal refrigerator space, and 3 1/2 cu. ft. of frozen storage space in two drawers, plus a separate ice cube making compartment.

Two new Deepfreeze home freezer models were on display. The new models, both of full 6-cu. ft. capacity, are the deluxe model C-6, and the model B-6.

The deluxe model C-6 will retail at \$269.95, and the B-6 at \$239.95. These models offer an additional full cubic foot of capacity and extra features at the same retail price as the



New Deepfreeze model B-6.

previous 5-cu. ft. models which they supplant in the company's line, Deepfreeze officials claim.

Features of the deluxe model C-6 include counter-balanced lid with built-in tumbler lock, front-mounted automatic temperature control, interior light, three removable metal storage baskets and two metal storage dividers, and a 5-year protection

plan. The C-6 is 36 in. high, 38 in. wide, 30 1/2 in. deep. It will hold more than 210 lbs. of assorted foods.

The model B-6 is identical in construction, capacity, and size, but without light, baskets, or lock. The 5-year food protection plan is included with this model.

## Sub-Zero Freezer Now Has 3 Chest Models

Sub-Zero Freezer Co., Inc., which displayed equipment at the Furniture Mart for the first time, announced that it is now starting production on three chest-type freezers of 15, 20, and 30-cu. ft. capacities, the latter for remote installation.

Heretofore, the firm had been producing only one chest-type model, an 18-cu. ft. freezer which is being discontinued with the new line. Sub-Zero also manufactures several upright models.

In addition to the new freezers, Sub-Zero is also starting production on 6, 8, and 12-can milk coolers of the cascade type. These will be available with or without units. A spokesman said the 6-can cooler will be priced at \$459, the 8-can deluxe at \$575, and the 12-can deluxe at \$802.

## Schaefer Offers New Bottled Milk Cooler

Now in production by Schaefer, Inc., is a new bottled milk cooler to be used for pre-cooled storage. The cooler, which was not on display, has a stainless steel working top, a heavy wire screen to protect the bottom, removable wire shelves to segregate the bottles, and a drain hose. List price is \$333.50.

## Dearborn Stove Making Evaporative Coolers

At the Dearborn Stove Co. showroom, it was reported that the firm is now going into full-scale production on three models of evaporative coolers and fans and that the units will be promoted by an intensified promotional program.

Model designations, c.f.m. ratings, and retail prices were announced as follows: DEF-22, 2,200, \$59.95; DEB-25, 2,500, \$119.95; DEB-35, 3,500, \$149.95. The company was said to be planning to expand the line.

According to a price list handed out, the prices are guaranteed against decline to June 1, 1949.

## Estate Adds Controls For 'Bar-B-Kewer'

A refinement in the top model of the Estate electric range line, a spokesman pointed out, is that the "Bar-B-Kewer" is now automatically controlled, the same as the oven. Estate's 1949 range lines include five conventional electric ranges, one coal and electric combination, and one oil and electric combination, and nine gas ranges. The electric and combination line is priced from \$219.95 to \$379.95 and the gas line from \$169.95 to \$319.95.

## Lindemann & Hoverson

Introduced by A. J. Lindemann & Hoverson Co. was a new deluxe two-oven electric range priced at approximately \$425. Altogether, this firm is producing seven electric ranges ranging in price from \$189.50 to \$425, according to a representative.

## Barlow & Seelig Co.

Barlow & Seelig Mfg. Co. was showing buyers two new products, a wringer-type washer retailing at \$89.95 and a fully-automatic cabinet ironer priced at \$99.95.

## Altorfer Bros. Co.

Altorfer Bros. Co. also was showing two new wringer-type washers recently added to its line. They are the Model 229 (7-lb. capacity) at \$119.95 and the Model 405 (9-lb. capacity) at \$149.95.

*alive with* **STYLE!**

MODEL 110

**Amana**

**FREEZERS • REFRIGERATORS**

Say "yes" to every prospect with the complete, smartly styled, better-built Amana line. Write: Refrigeration Division—

**AMANA SOCIETY, AMANA, IOWA**

## New in the Leonard 1949 Lineup



George Roth of Paramount Radio Co., Omaha, attending the winter mart, is "checked in" on the new Leonard model SL 8.6-cu. ft. refrigerator by Leonard Sales Manager Walter Jeffrey.

*Here's how* **Wolverine Copper**  
**Refrigeration Tube is packaged for you**

Individually cartoned in 50-ft. lengths, Wolverine seamless, non-ferrous tubing reaches you in perfect, ready-to-use condition—hydrostatically tested, with both ends crimped and solder-sealed.

Here is quality-controlled tubing in a form that is easy to buy, easy to inventory, easy to display, easy to merchandise, easy to use. Specify Wolverine on your next order of copper refrigeration tube.

**WOLVERINE TUBE DIVISION**  
CALUMET AND HECLA CONSOLIDATED COPPER COMPANY  
INCORPORATED

MANUFACTURERS OF SEAMLESS NON-FERROUS TUBING

1413 CENTRAL AVENUE

DETROIT 9, MICHIGAN



## Program for Chicago ASHVE Meetings--

(Continued from Page 1)

exposition, according to its management, which is also continuing the policy of limiting attendance to the trade. Visitors must register, but there will be no admission charge.

Latest list of the exhibitors, showing also their booth numbers, appears on this page of this issue of the NEWS.

Highlights of the ASHVE meeting program are as follows:

### MONDAY, JAN. 24

8:30 a.m.—Registration, second floor.

9:30 a.m.—Business session, Grand Ballroom.

Greetings; reports of officers and committees; report of committee on research, by L. N. Hunter, chairman.

"Physiologic Adjustments of Normal Subjects and Cardiac Patients to Sudden Change in Environment," by Nathaniel Glickman; Tohru Inouye; R. W. Keeton, M.D.; I. R. Callen, M.D.; F. K. Hick, M.D.; and M. K. Fahnestock.

"Over-all Coefficients for Flat Glass, Determined under Natural Weather Conditions," by G. V. Parmelee and W. W. Aubele.

12:15 p.m.—Welcome luncheon. Speaker: Dr. Henry T. Heald, president, Illinois Institute of Technology.

2 p.m.—Opening Ninth International Heating & Ventilating Exposit-

tion, International Amphitheater. 9 p.m.—Informal Party, Grand Ballroom.

### TUESDAY, JAN. 25

9:30 a.m.—Technical session, Grand Ballroom.

Report of tellers of election.

"The Internal Performance of an Induced Draft, Packed Cooling Tower," by N. W. Snyder.

"Heat Transfer Rates for Refrigerant Boiling in Horizontal Tube Evaporators," by L. G. Seigel, W. L. Bryan, and M. C. Huppert.

"Psychrometric Factors in the Air Conditioning Estimate," by C. M. Ashley.

12:30 p.m.—Luncheon meeting. Speaker: Cyril Tasker, director of research, ASHVE.

### WEDNESDAY, JAN. 26

9:30 a.m.—Technical session, Grand Ballroom.

"Are Automatic Air Shutters Justified on a Gas-Fired Conversion Burner?" by W. M. Myler, Jr., and H. W. Nelson.

"Performance of 14 Masonry Chimneys Under Steady State Conditions," by P. R. Achenbach and S. D. Cole.

"Performance of Residential Chimneys," by L. B. Schmitt and R. B. Engdahl.

2 p.m.—Technical session, Grand Ballroom.

"Performance of an Electrical System of Panel Heating with Four Stages of Insulation," by R. J. Lorenzi and J. F. Schreiber.

"Heating a Basementless House with Radiant Baseboard," by R. H. Weigel and W. S. Harris.

"Heating Panel Time Response Study," by A. B. Algren and Ben Ciscel.

7 p.m.—Annual banquet. Toastmaster: John Howatt, past president, ASHVE. Speaker: Dr. Clark G. Kuebler, president, Ripon college, Ripon, Wis. Subject: "Formula for Freedom."

### THURSDAY, JAN. 27

10 a.m.—Technical session, North Ballroom.

"Turbulence in Air Distribution," by H. B. Nottage.

"Adjustment and Balancing of the Air Delivery Through a System of Manifold Air Diffusers," by G. S. Dauphinee and Peter Argentieri.

"Air Distribution and Draft," by John Rydberg and Per Norback. Installation of officers.

## List of Firms Scheduled To Exhibit At Heating, Ventilating Show

Exhibitor	Space No.
Ace Engineering Co., Chicago.....	321
Acme Equipment Co., Muskogee, Okla. .	126
Acme Industries, Inc., Jackson, Mich. .	620
Aerofin Corp., Syracuse, N. Y. ....	1317
Air Control Products, Inc., Coopersville Mich. ....	933-935
Air Controls, Inc., Cleveland .....	124-225
Air Devices, Inc., New York City .....	843
Air Filter Corp., Milwaukee .....	1342
Air-Maze Corp., Cleveland .....	141
Air-O-Cel Co., Detroit .....	1211
Airtemp Div., Chrysler Corp., Dayton, Ohio .....	814
Airtherm Mfg. Co., St. Louis .....	1121
Aldrich Co., Wyoming, Ill. ....	243
American Air Filter Co., Inc., Louisville, Ky. ....	302 & 401
American Artisan, Chicago .....	525
American Gas Association, New York City .....	1232-1234
American Hydrovac, Inc., Brooklyn ..	1340
American Radiator & Standard Sanitary Corp., Pittsburgh .....	708
American Society of Heating & Ventilating Engineers, New York City .....	903
American Steel & Wire Co., Chicago .....	232-331-333-335
American Thermal Industries, Inc., Detroit .....	1301
Ames Iron Works, Oswego, N. Y. ....	101
Anchor Div., Stratton & Terstegge Co., New Albany, Ind. ....	912-914
Anderson Co., The V. D., Cleveland ..	135
Anemostat Corp. of America, New York City .....	1001-1002-1101
April Showers Co., Washington, D. C. .	119
Armstrong Furnace Co., Columbus, Ohio .....	311-313-315
Armstrong Machine Works, Three Rivers, Mich. ....	915-917

Auer Register Co., Cleveland .....	230
Austin Heating Service, Everett, Mass. ....	107-109-111
Au-Temp-Co. Corp., New York City ..	908
Automatic Devices Co., Chicago .....	504
Automatic Products Co., Milwaukee ..	413-415
Avery Farm Machinery Co., Hart Burner Div., Peoria, Ill. ....	1337
Bacharach Industrial Instrument Co., Pittsburgh .....	1322
Bahnsen Co., The, Winston-Salem, N. C. .	102
Baltimore Aircoil Co., Inc., Baltimore ..	412
Barber-Colman Co., Rockford, Ill. ....	1343
Barnes & Jones, Inc., Boston .....	417
Bauer & Black, Division of The Kendall Co., Chicago .....	1112
Bearlee Products Co., Green Bay, Wis. .	921
Bell & Gossett Co., Morton Grove, Ill. .	626
Beverly Shear Mfg. Co., The, Chicago ..	328
Borg-Warner Corp., Norge-Heat Div., Detroit .....	508
Breuer Electric Mfg. Co., Chicago ..	1313-1315
Brundage Co., The, Kalamazoo, Mich. .	443
Bryant Heater Co., Cleveland .....	1243
Buffalo Forge Co., Buffalo .....	216-220
Builders Iron Foundry, Providence, R. I. .	117
Builders-Providence, Inc., Providence, R. I.	117
Bundy Tubing Co., Detroit .....	1339
Burnham Corp., Boiler Div., Irvington, N. Y. ....	436-438
Carnegie Illinois Steel Corp., Pittsburgh .....	232-331-333-335
Carrier Corp., Syracuse, N. Y. ....	734
Catskill Metal Works, Inc., Catskill, N. Y. ....	923-925
Central States Steel Boiler Co., Chicago .	540
Century Engineering Corp., Cedar Rapids, Iowa .....	726
Chace Co., W. M., Detroit .....	234
Char-Gale Mfg. Co., Minneapolis .....	939
Chelsea Fan & Blower Co.,	

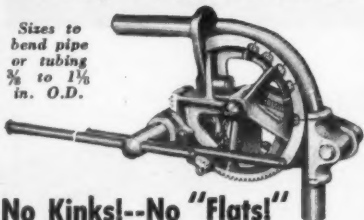
Irvington, N. J. ....	1028-1030
Chicago Blower Corp., Chicago .....	547
Chicago Pump Co., Chicago .....	1021
Chrysler Corp., Airtemp Div., Dayton, Ohio .....	814
Cinco Window Div., F. C. Russell Co., Cleveland .....	1327 to 1335
Clarage Fan Co., Kalamazoo, Mich. .	1208-1210
Clayton & Lambert Mfg. Co., Louisville, Ky. ....	1348
Climax Machinery Co., Indianapolis .....	1328-1330
Coleman Co., Inc., The, Wichita, Kan. ....	1124-1126
Cole-Sewell Engineering Co., St. Paul. .	1013
Columbia Steel Co., San Francisco .....	232-331-333-335
Combustion Control Corp., Cambridge, Mass. ....	414
Combustion Div., The Steel Products Engineering Co., Springfield, Ohio .....	1128-1130
Comfort Products Corp., Dallas, Tex. .	326
Commercial Filters Corp., Boston .....	421
Conco Engineering Works, H. D. Conkey & Co., Mendota, Ill. ....	142
Condensation Engineering Corp., Chicago	514
Connor Engineering Corp., W. B., New York City .....	427-429
Continental Air Filters, Inc., Louisville, Ky. ....	932
Crane Co., Chicago .....	735
Croft Mfg. Co., Flushing, N. Y. ....	930
Curtis Refrigerating Machine Div., Curtis Mfg. Co., St. Louis .....	224-226-228 325-327-329

Cyclone Fence Div., American Steel & Wire Co., Chicago..... 232-331-333-335  
Delavan Engineering Co.,  
Des Moines, Iowa ..... 516-518 || Dodge Corp., F. W., New York City .. | 231-233 |
Dole Valve Co., The, Chicago .....	424-426
Dollinger Corp., Rochester, N. Y. ....	316
Domestic Engineering Catalog Directory, Chicago .....	1042
Domestic Engineering Co., Chicago ..	1042

(Concluded on next page)

### Bend it RIGHT the First Time! —with a HOLSCRAW Handy TUBE BENDER

Sizes to  
bend pipe  
or tubing  
1/2" to 1 1/2"  
in. O.D.



### No Kinks!—No "Flats!"

Thousands in use for many years. Light weight, easy to carry, handy to use on the job. Save time! Make smooth bends in iron and steel pipe, conduit, or copper, brass, and aluminum tubing.

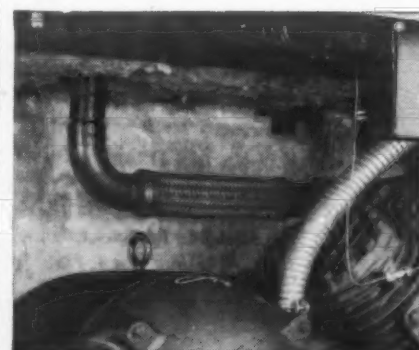
Shown above, Model B4-10 for 1/2 in. O.D. tube, \$11.25 F.O.B. Evansville, Ind. See complete line Handy Tube Benders at your local supply house, or write

**HOLSCRAW BROS., INC.**  
422 Willow Road, Evansville 11, Ind.

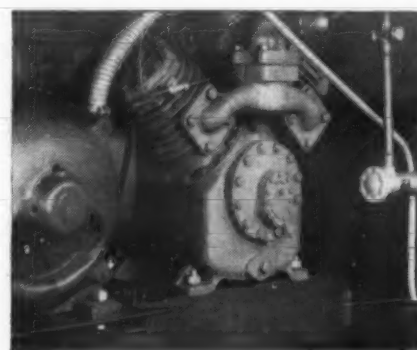
## GET MORE AIR CONDITIONING



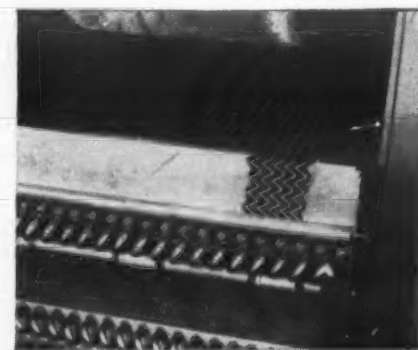
*Refrigerated Cooler-air*  
the complete, ready-to-run "central plant"  
unit for a store—a floor—or a building



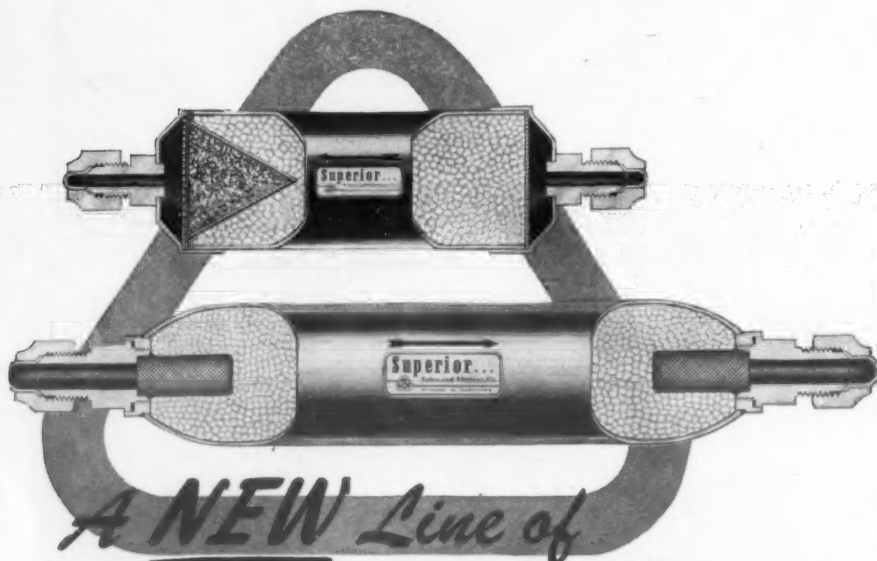
**5** Every compressor line connection is protected from vibration by bronze-web flexible couplings. Not only do they eliminate noise, but they assure tight fittings for the life of the unit.



**6** Heavy-duty compressor has well-balanced crankshaft, extra large valves, suction oil separator that separates oil and refrigerant. Compressor and driving motor are force-ventilated.



**7** Water baffle in evaporative condenser keeps cooling water from being drawn up into blower. Single motor operates blower and water pump. This blower also cools motor and condenser.



## A NEW Line of SUPERIOR DRIERS

The DRIERS with the Plus Features

- ★ MODERN DESIGN
- ★ EFFICIENT OPERATION
- ★ REFILLABLE AND NON-REFILLABLE TYPES
- ★ ALL BRASS CONSTRUCTION

For complete details and specifications on the New Driers and other Superior products, ask your Wholesaler for a copy of our NEW Catalog R3.

(or a copy may be obtained by writing to us)



**Superior Valve and Fittings Co.**  
1500 WEST LIBERTY AVE., PITTSBURGH 14, PENN.  
OFFICES IN PRINCIPAL CITIES LOCAL CHICAGO 16 LOS ANGELES 15 JEROME 17/18/19/20

**UNITED STATES AIR CONDITIONING CORPORATION**



## List of Exhibiting Firms--

(Concluded from preceding page)

Domestic Engineering Magazine, Chicago.....1042	Grinnell Co., Inc., Providence, R. I.... 201	Kent Co., Inc., The, Rome, N. Y.....1010	National Radiator Co., The, Johnstown, Pa. ....106-108	Steel Products Engineering Co., The Combustion Div., Springfield, Ohio.....1128-1130
Dawagiac Steel Furnace Co., Dowagiac, Mich. ....431-433	Hammond Brass Works, Hammond, Ind..1215	Kewanee Boiler Corp., Kewanee, Ill.. 416-420	National Tube Co., Pittsburgh.....232-331-333-335	Stefco Steel Co., Michigan City, Ind..130-132
Doyle Vacuum Cleaner Co., Grand Rapids, Mich. ....1344-1346	Harris & Co., Chicago.....332	Kreuger-Sentry Gauge Co., Inc., Green Bay, Wis. ....527-529	Nelson Corp., The Herman, Moline, Ill. 715	Stewart Mfg. Co., Inc., Bloomfield, N. J. 209
Dravo Corp., Pittsburgh.....1242	Hart Burner Div., Avery Farm Machinery Co., Peoria, Ill. ....1337	Lau Blower Co., The, Dayton, Ohio..116-120	Newark Transformer Co., Linden, N. J. 113	Stratton & Terstegge Co., Anchor Div., New Albany, Ind. ....912-914
Dreis & Krump Mfg. Co., Chicago.....242	Hart & Cooley Mfg. Co., Holland, Mich. 425	Lewis & Co., Inc., Baltimore.....137	New York Blower Co., Chicago.....1129-1131	Sturtevant Div., Westinghouse Electric Corp., Boston.....834
Dunham Co., C. A., Chicago.....308-310-312-314	Heat-Timer Corp., New York City.....330	Libbey-Owens-Ford Glass Co., Toledo.235-237	Niagara Blower Co., New York City.... 835	Super Electric Products Corp., Jersey City, N. J. ....1133-1135
Duo-Therm Div., Motor Wheel Corp., Lansing, Mich. ....145-247	Heating, Piping & Air Conditioning, Chicago.....525	Linde Air Products Co., New York City. 246	Niagara Furnace Div., The, Forest City Foundries Co., Cleveland.....1233-1235	Syncromatic Corp., Watertown, Wis....1106
Dwyer Mfg. Co., F. W., Chicago.....437	Heating Publishers, Inc., New York City.1146	Lockformer Co., The, Chicago.....531	Norge-Heat Div., Borg-Warner Corp., Detroit.....508	Taco Heaters, Inc., Providence, R. I.... 442
Eckhart Mfg. Co., Roselle, N. J....1027-1029	Henry Furnace Co., The, Medina, Ohio.....1024-1026-1125-1127	McDonnell & Miller, Inc., Chicago.....942	Olsen Mfg. Co., The C. A., Elyria, Ohio.....1024-1026-1125-1127	Tal Bender, Inc., Milwaukee.....129
Emerson Electric Mfg. Co., St. Louis.....1017	Hoffman Specialty Co., Indianapolis.....1032-1034	McQuay, Inc., Minneapolis.....1031-1033-1035	OWENS-CORNING	Temp-Control, Inc., Peoria, Ill. ....1307
Empire Stove Co., Belleville, Ill. ....943	Holcomb & Hake Mfg. Co., Inc., Indianapolis.....1336-1338	Maid-O'-Mist, Inc., Chicago.....1015	Owens-Corning Fiberglas Corp., Toledo.....1114-1116-1120	Tennessee Coal, Iron & Railroad Co., Birmingham, Ala. ....232-331-333-335
Farr Co., Los Angeles.....538	Home Ease Products Co., Paterson, N. J. 941	Marsh Corp., Jas. P., Skokie, Ill.....238	Pacific Steel Boiler Div., United States Radiator Corp., Detroit.....1012-1014-1016-1020	Thatcher Furnace Co., Garwood, N. J. 405
Fasco Industries, Inc., Rochester, N. Y..1220	Hook & Ackerman, Inc., New York City.1226	Mercoid Corp., The, Chicago.....1137-1139	Patten Co., J. V., Sycamore, Ill.....919	Thermobloc Div., Pratt-Daniel Corp., East Portchester, Conn. ....1209
Fedders-Quigan Corp., Buffalo.....524-526	Ilg Electric Ventilating Co., Chicago..338-439	Metals & Controls Corp., Spencer Thermostat Div., Attleboro, Mass.... 720	Penn Electric Switch Co., Goshen, Ind.. 447	Thermoseal Window Div., Cleveland.....1327 to 1335
Federal Boiler Co., Inc., Midland Park, N. J. ....906	Illinois Engineering Co., Chicago.....1143	Metromatic Mfg. Co., Everett, Mass. ....107-109-111	Pennsylvania Furnace & Iron Co., Warren, Pa. ....1236-1238	Thrush & Co., H. A., Peru, Ind....520-522
Field Control Div., H. D. Conkey & Co., Mendota, Ill. ....1221	Illinois Testing Laboratories, Inc., Chicago.....911-913	Metromatic Oil Burner Co., Everett, Mass. ....107-109-111	PERFECTION STOVE CO., Cleveland 1310-1312-1314-1316-1318-1320	TORRINGTON
Fireline Stove & Furnace Lining Co., Chicago.....936	IMPERIAL BRASS	Meyer Furnace Co., Peoria, Ill. ....343	Perfex Corp., Milwaukee.....428-430-432-434	Torrington Mfg. Co., Torrington, Conn... 342
Fitzgibbons Boiler Co., Inc., New York City.....634	Imperial Brass Mfg. Co., The, Chicago.. 138	Mid-Continent Metal Products Co., Chicago.....1231	Petroleum Heat & Power Co., Stamford, Conn. ....821	Trane Co., LaCrosse, Wis. ....615-627
Forest City Foundries Co., The, Cleveland.....1233-1235	Independent Register Co., The, Cleveland 317	Milwaukee Gas Specialty Co., Milwaukee.....1228-1230	Petrometer Corp., Long Island City, N. Y. ....1147	Triad Products Corp., Chicago.....128
Frick Co., Waynesboro, Pa. ....202	Industrial Press, The, New York City..537-539	MINNEAPOLIS-HONEYWELL	Pittsburgh Corning Corp., Pittsburgh... 339	Trion, Inc., McKees Rocks, Pa.....121
Frigidaire Div., General Motors Corp., Dayton, Ohio.....737	Iron Fireman Mfg. Co., Cleveland.....211-213-215-217-221	Minneapolis-Honeywell Regulator Co., Minneapolis.....1046-1047	Plibrico Jointless Firebrick Co., Chicago. 936	Triplex Heating Specialty Co., The, Peru, Ind. ....112-114
Fueloil & Oil Heat Magazine, New York City.....1146	Jackson & Church Co., Furnace Div., Saginaw, Mich. ....815	Madine Mfg. Co., Racine, Wis.....1142	Plumbing & Heating Business, Plumbing & Heating Publishing Co., New York City.....110	Turnbull Mfg. & Distributing Co., Detroit.....1206
General Blower Co., Morton Grove, Ill..1207	Jefferson Electric Co., Bellwood, Ill.... 926	Monarch Mfg. Works, Inc., Philadelphia. 105	Plumbing & Heating Journal, New York City.....528	Tuttle & Bailey, Inc., New Britain, Conn. 920
General Controls Co., Glendale, Calif..1107	Jenn Air Products Co., Indianapolis.....937	Morrison Products, Inc., Cleveland.....1217	Prat-Daniel Corp., Thermobloc Div., East Port Chester, Conn. ....1209	United States Air Conditioning Corp., Minneapolis.....1036-1038
General Electric Co., Apparatus Dept., Schenectady, N. Y. ....1025	Jet-O-Matic Corp., Atlanta.....1326	Morrison Steel Products, Inc., Buffalo...1229	%Proportioners, Inc., Providence, R. I. 117	U. S. Machine Corp., Lebanon, Ind. ....1246-1347
General Engineering & Mfg. Co., St. Louis.....1132-1134-1136-1138	Johnson Service Co., Milwaukee.....1201-1202	Morse-Smith-Morse, Inc., Watertown, Mass. ....934	Pyle-National Co., Chicago.....1332-1334	United States Radiator Corp., Pacific Steel Boiler Div., Detroit.....1012-1014-1016-1020
General Filters, Inc., Detroit.....103	Jones & Brown, Inc., Pittsburgh.....1302	Motor Wheel Corp., Duo-Therm Div., Lansing, Mich. ....145-247	Quiet-Heat Mfg. Corp., Newark, N. J..1011	United States Register Co., Battle Creek, Mich. ....239
General Fittings Co., Providence, R. I. 347	Joy Mfg. Co., Pittsburgh.....1108-1110	Mt. Hawley Mfg. Co., Peoria, Ill.....535	Radiant Utilities Corp., Brooklyn.....236	United States Steel Corp., Pittsburgh.....232-331-333-335
Greenlee Tool Co., Rockford, Ill. ....1309-1311	Kaustine Co., Inc., Perry, N. Y.....905	Mueller Furnace Co., L. J., Milwaukee.....1037-1039-1043	Radiation Furnace Corp., Benton Harbor, Mich. ....916	United States Steel Export Co., Chicago.....232-331-333-335
	Keeney Publishing Co., Chicago.....525	Multi-Vent Div., The, Pyle-National Co., Chicago.....1332-1334	Randall Graphite Bearings, Inc., Chicago 324	United States Steel Supply Co., Chicago.....232-331-333-335
	Kehm Corp., The, Chicago.....924	Nash Engineering Co., The, South Norwalk, Conn. ....642	Raytheon Mfg. Co., Waltham, Mass.... 907	Vibration Eliminator Co., The, Long Island City, N. Y. ....910
	Kendall Co., The, Bauer & Black Div., Chicago.....1112	National Air Conditioning, Inc., Johnstown, Pa. ....346		Viking Mfg. Corp., The, Cleveland.....635
		National Oil Burner Co., Inc., Brooklyn.1325		Cleveland.....517-521

## FOR EVERY DOLLAR YOU SPEND

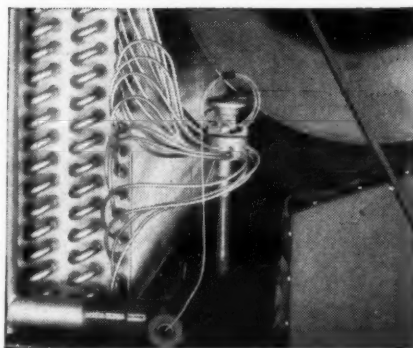
*Feature after feature to save you money*

Think of this... you buy a complete air conditioning plant as easily as you buy a hot water heater. Every blower, condenser, motor, filter, coil and pipe is connected, charged, tested, balanced and ready to run.

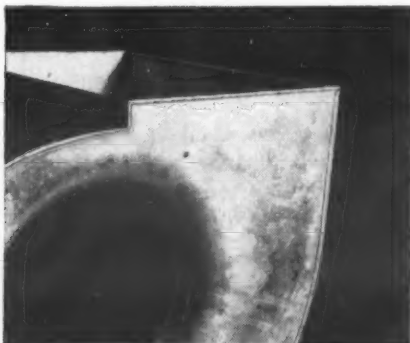
You can forget about costly plumbing layouts and condensing towers. Three simple connections—to ducts, to water, to power—put the Refrigerated Kooler-air in operation. You slash water supply bills by 95%. You have no expensive water disposal problems. You save on maintenance costs. You get the cheapest air conditioning you've ever heard of... yet you get the finest continuous air conditioning you've ever had.

You get a completely pre-engineered unit of whatever size you need... from 3 to 40 tons capacity... in a compact, beautifully finished cabinet that puts all your air conditioning machinery in one place, instead of scattering it out from roof to basement.

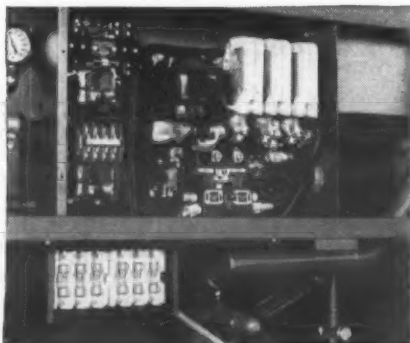
You get every one of the proved features detailed on these two pages... features that mean air conditioning economy, efficiency and satisfaction. You'll want to know more about Refrigerated Kooler-air, and we'll send you complete information as soon as you tell us where to send it.



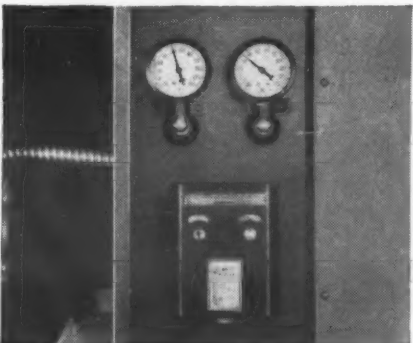
1 Refrigerant system is charged and tested in our plant. It is kept in perfect balance by automatic thermal controls that respond instantly even to the most sudden changes of temperature.



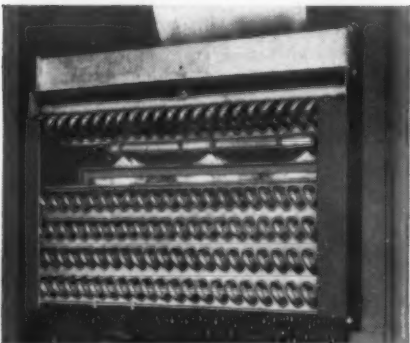
2 Blower in evaporative condenser is heavily galvanized after fabrication so that even the welds are completely protected from rust and corrosion. Efficient design assures quiet operation.



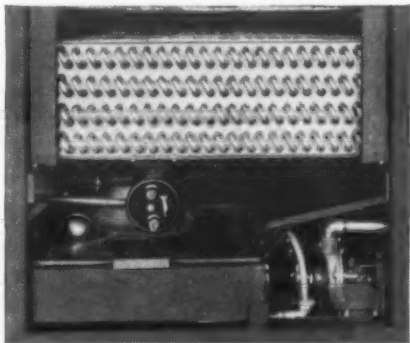
3 All electrical circuits are controlled from this simplified panel. Each of the motor circuits is individually protected against overload or other failure by its own fuse.



4 Twin gauges indicate head pressure and suction pressure of refrigerant to give you quick assurance that the unit is operating properly, that there's sufficient refrigerant in the system.



8 Two-stage evaporative condenser is integral part of unit. It eliminates old-fashioned water towers and expensive plumbing. It cools refrigerant to within 3 to 5 degrees of wet-bulb reading.



9 Water reservoir and return pump save you 95% of your water bill and practically eliminate costly water disposal problems. Automatic valve replaces evaporation losses.



10 This name plate on every Refrigerated Kooler-air is the accepted symbol of the finest in air conditioning equipment... whether you're conditioning a store—a floor—or a building.

## Announcement

Refrigeration Contractors are the logical ones to sell, install and service equipment required to refrigerate George-Ann Warm Room Lockers and Walk-in Boxes.

We invite them to cooperate with our agents (openings for which are still available) who are especially trained in locker financing and operation, meat cutting, processing and merchandising, as well as in grocery store and locker plant layouts.

All inquiries will be promptly handled.

WRITE:

GEORGE-ANN COMPANY 321 HIGHLAND DRIVE SEATTLE, WASHINGTON







**NOLIN—THE QUALITY LINE**  
Tops In ★ VALUE ★ ECONOMY ★ PERFORMANCE

Nolin Standard and DeLuxe Model Walk-in Coolers. Regular sizes or built to special order. Practical, efficient coolers constructed for long life and dependable service. Outstanding cooler values.

Nolin All Purpose Dry Beverage Cooler. America's finest. Attractive in appearance, unexcelled in operation. Equipped with three heavy duty coils, plus Freez O Rific Circulator. Has large capacity, is faster freezing and is economical in operation.

ATTENTION DEALERS—SOME TERRITORIES AVAILABLE

● DISPLAY CASES  
● WALK-IN COOLERS  
● BEVERAGE COOLERS

**NOLIN MANUFACTURING COMPANY, INC.**  
1100 Madison Ave., Montgomery 2, Ala.

## THE MASTER SERVICE MANUALS — — —

— — — and other books of the Refrigeration Library are depended upon as textbooks in trade schools from coast to coast.

BUSINESS NEWS PUBLISHING CO., DETROIT



**STREAMLINED COOLER LOCK No. 800**  
FULLY AUTOMATIC  
UNIVERSAL IN APPLICATION  
EITHER RIGHT OR LEFT HAND  
CAST BRONZE  
NICKEL OR CHROME FINISH  
WEIGHT—2.3 POUNDS



**STREAMLINED HINGE No. 1005**  
FORGED BRASS - 5-INCH BLADE  
NICKEL OR CHROME FINISH  
A full range of sizes for all needs

**GOOD  
HARDWARE  
for  
GOOD,  
HARD  
WEAR**

Good hardware ———  
smart looking, built to function  
smoothly and to last a long time.

*Write for Catalog*

**ARCADE**

**MANUFACTURING DIVISION**  
ROCKWELL MANUFACTURING COMPANY  
FREEPORT, ILLINOIS

## 'The Farmers' Drugstore'

Don Barth, co-owner of Barth Drugstore, in Lincoln, Neb., makes a sale from the new Frigidaire recently installed in the stock department.



\*\*\*

## New Refrigerator Helps Double Serum, Drug, And Vaccine Sales In Animal Health Section

LINCOLN, Neb.—A refrigerator placed in the center of his animal health department and stocked with \$3,000 worth of fresh serums, vaccines, sulpha drugs, penicillin and other biologicals for animals, has enabled Don Barth of the Barth Drugstore to double his sales of these items to farmers during the past two years.

The refrigerator, a commercial-type Frigidaire, has been set flush with the wall fixture of the 100-ft.-long animal health department. It serves as a base for a panel and storage compartment for veterinary instruments, marked at the top with a neon "Stock Dept." sign.

In order to keep farmers informed of the fact that they can get the new serums and other drugs being featured by the manufacturers in the national farm magazines, Barth has combined radio with newspaper advertising and store display.

A radio "spot" announcement is used right after the noon broadcast of news and market reports over a local station—a listening "must" for a majority of the farm people.

The spot announcement along with periodic advertisements in the Lincoln newspapers and a weekly shopping paper which circulates widely in the rural territory, names the new items about which the farmers have read and informs them they can get the items at Barth's.

The point is emphasized that Barth's is "The Farmers' Drugstore" and they can get all of their drug needs as well as animal health merchandise there.

Barth also gets all literature put out by the University of Nebraska, College of Agriculture, as well as by the drug manufacturers, to keep himself informed on the subject of animal health.

Mimeographed sheets are prepared at the store and mailed to farmers to inform them of new biologicals in stock in the department's refrigerator.

Promotion also stresses the freshness of Barth's stock department drugs. Mounted under the marquee is a large arrow pointing to the entranceway and bearing the sign, "Serums—Biologicals—Always Fresh—Refrigerated."

Decals on the doors of the refrigerator draw attention to the fact that the drugstore carries two of the most famous brands in the field of biologicals for animals.

Barth pointed out that the refrigerator is a vital psychological factor in boosting stock department sales as well as a necessary fixture in operating such a department.

Growth of the freezer locker industry in the past few years also furnished the drugstore with new volume sellers in wrapping paper, cellophane, smoke salt, liquid "smoke," and pumps, cartons, and other containers, and sealers for storing meat, vegetables, and fruit in the lockers.

These were given a section in the animal health department. Barth buys his heavy wrapping paper in large quantities and "bulks" it out to customers.

### Howard Will Move Feb. 15

HATBORO, Pa.—Howard Refrigerator Co., here, has announced that effective Feb. 15, the main office and plant will occupy their new quarters at 507 Arch St., Philadelphia. Centrally located, the change will afford a more convenient and efficient operation, the company said.

### Smith-Hughes Vocational School Offering Refrigeration Course

ATLANTA, Ga.—A new course in refrigeration opened recently (Jan. 3) at the Smith-Hughes Vocational school according to announcement by principal C. R. Townsend. He says a day course will be offered to anyone who can qualify for pre-employment training. Night classes will be for those employed in refrigeration work but desiring further study.

### Memphis Dealer Gets G-E Lines

MEMPHIS, Tenn.—Memphis Refrigeration Co., 1275 Madison Ave., has announced its appointment as franchised dealer for General Electric commercial refrigeration, air-conditioning, heating. C. E. Hendricks is president of this firm, and C. E. Bunch, vice president.

### Net Sales of \$12,596,056 Set Record for Copeland

SIDNEY, Ohio—Record net sales of \$12,596,056 and a peak net income of \$656,293 were reported for the fiscal year ending Sept. 30, 1948 by the Copeland Refrigeration Corp. here recently.

Net sales were up 14% over the \$11,037,685 scored in fiscal 1947. Earnings, however, were up only 3% over the \$636,634 made last year.

This year's earnings were equal to \$1.09 per share on 600,000 shares of common stock as compared with \$1.06 per share last year.

**Specify**  
**DAVISON PA 100**  
refrigeration grade  
**SILICA GEL**

CHANGED WITH  
**DAVISON'S**  
**SILICA GEL**  
REFRIGERATION GRADE

in factory-charged  
dryers bearing  
this label or in bulk for refilling  
**PA 100 is your guarantee of all-around, superior performance**  
**SEE YOUR JOBBER**

### WANTED

#### Sales Engineer—Commercial Refrigeration Coils

We require a representative to travel the states of Indiana, Michigan and Ohio, including parts of Kentucky and Pennsylvania.

He must have the following qualifications:

Thorough knowledge of commercial refrigeration and coils in particular. Graduate engineer preferred.

Must intimately know manufacturers and jobbers in the area.

Past record must bear strict investigation.

Age—35-45.

To the right man this position offers a permanent connection, with substantial remuneration.

One other line can be handled providing it meets with our approval.

Your reply will be treated strictly confidential.

**BETZ CORPORATION**  
HAMMOND, INDIANA



### 3 Factors Will Determine Availability of Copper, Lead, and Zinc in '49

NEW YORK CITY—Three factors will determine whether there will be enough copper, zinc, and lead available this year to meet the demands of the refrigeration, air conditioning, and other copper consuming industries, T. E. Veltfort, manager of the Copper and Brass Research Association declared recently.

They are, he said:

1. The amount of copper, zinc, and lead which the government will stockpile for its national defense program.

2. The labor situation in the mines, mills, and transport. Capacity production will be needed to meet current demand.

3. The amount of these metals that can be imported and, conversely, the amount that will have to be shipped abroad under the European Recovery Program.

Veltfort pointed out that domestic mines, even operating at peak capacity cannot fill this country's demands for the metals. He suggested that it would "be helpful" if South African mines could channel more of their production to the United States.

"An acute copper shortage exists today," Veltfort stated, "In fact, the supply is so tight the brass and wire mills are finding it difficult to obtain sufficient to continue normal operation."

He declared that despite increased copper imports during the last year, stocks of both refiners and fabricators here have declined substantially.

### E. W. Peterson, Treasurer of Mechanical Heat & Cold, Dies

DETROIT—E. W. Peterson, treasurer, and for 22 years associated with Mechanical Heat & Cold, Inc. here, died after a short illness on Dec. 29. Peterson was widely known in the local oil heating and combination window trade.

### 8.1% More Customers Discounting Bills Than In Nov. 1947, Survey Indicates

CHICAGO—More customers are discounting their bills and letting their accounts run beyond the due date while fewer are paying their accounts when due, a survey of 250,000 active accounts of Chicago manufacturers and wholesalers selling throughout the country revealed recently.

The survey was made by the Chicago Association of Credit Men and

### Air Filter Manufacturer Changes Name of Product

MADISON, Wis.—Name of the air filters produced by Research Products Corp. here has been changed from "Research Air Filters" to "R-P" filters, it was announced by R. E. Qnstad, president.

After considering many suggestions on a shorter product designation, Research executives agreed to accept the abbreviated "R-P" commonly used for years in the field.

### Minneapolis Considers Minimum Temperatures Law for Dwelling Units

MINNEAPOLIS—The city council has just taken under advisement an "adequate heating" ordinance, reported on favorably by the city council ordinances and legislation committee, which would require specific degrees of temperatures in all city dwelling units.

Originally the measure was to apply to commercial and industrial buildings as well as living units but the former were dropped from the final recommendations.

Following protests of residents who appeared before the council committee, the bill was drawn to require these temperatures between Sept. 15 and June 1: 60° at 6:30 a.m.; 65° at 7:30 a.m., and 68° between 8:30 a.m. and 10:30 p.m.

Tests would be taken by health department inspectors, following any complaints by residents. Official thermometer must be 48 in. above the floor and not closer than three feet to an outside door, wall, or window.

Penalty for violations would be a fine of up to \$100 or up to 90 days imprisonment.

Some tenants had complained they had poor heating and ventilating conditions with temperatures often as low as 48° in their living quarters.

If the ordinance passes, temperatures of at least 68° during the daytime will be required in all apartments, rooming houses, and hotels.

### See Optimistic Picture:

HARRISON, N. J.—Sketching an optimistic picture of things to come in the air conditioning and refrigeration industry, officials of Worthington Pump & Machinery Corp. told their distributors at two separate meetings that the industry's products are now essential, rather than luxury, items.

Among the speakers at the meetings, in Houston, Tex., and Chicago were M. M. Lawler, manager of Worthington's air conditioning and refrigeration division, and William F. Bishop, assistant manager in charge of air conditioning and refrigeration distributor sales.

Bishop pointed to an increase of more than 400% in factory billings since 1940.

"The market for air conditioning and refrigeration equipment," he said, "has expanded in leaps and bounds in the last five years. Employment in the industry has increased 63% since 1937. Factory billings in 1940 were approximately \$50,000,000. It is estimated that factory billings for 1948 will be approximately \$220,000,000."

"This market will continue to expand. In addition to the normal program of new construction and expanded facilities in all fields requiring the usual applications, there are many new and essential applications being devised daily. No other industry has such a promising outlook... has so many potential customers in every commercial and industrial field."

Lawler stressed that "we have hardly scratched the surface of the applications and markets available."

### Refrigeration and Air Conditioning Markets Expand Rapidly as Products Become Essential

"Thousands of chemical and pharmaceutical products must have controlled temperature and humidity conditions as they move through the various phases of manufacture and storage," he said.

"Mining and metal working, autos and aircraft, paper-making and printing, transportation and communication, clothing, photographic materials, precision instruments, and electronic equipment are only a few of the broad industry classifications dependent, in varying degrees, on refrigeration and air conditioning."

The meeting at the Rice hotel in Houston was attended by 40 of the top personnel of 21 distributor organizations in southern and southwestern states. Fifty representatives from 31 distributor organizations in the middlewestern states attended the Chicago meeting, held at the LaSalle hotel.

In addition to Lawler and Bishop,

these others spoke to both groups:

C. E. Wilson, vice president; W. D. Smith, commercial vice president; F. J. Watt, assistant manager, general refrigeration; D. H. McCuaig, supervisor of engineering sales; Bruce T. LaPierre, assistant advertising manager; Philip H. Shaw, supervisor of distributor sales; Eugene C. Hamilton, manager of distributor service; and J. Neuhoof, chief engineer of the air conditioning and condensing units division.

R. P. Lockett, Sr., vice president of A. M. Lockett & Co., Ltd., addressed the Houston group and W. O. Wilson, commercial vice president of Worthington, spoke to the Chicago group.

### Liquid Carbonic To Pay Dividend

CHICAGO—Liquid Carbonic Corp. has declared a 5% stock dividend on the common, payable Jan. 20 to stock of record Jan. 3. The company has been paying 25 cents quarterly.

FRIENDLY · COURTEOUS · HELPFUL

# CHASE

## ONE STOP SERVICE

COMPLETE STOCKS — PERSONALIZED SERVICE — SATISFACTION

### CHASE REFRIGERATION SUPPLY CO.

546-48 W. 119th STREET CHICAGO 28, ILL.

# SPORLAN

## AIR-CONDITIONING CONTROLS

*combine*

### EFFICIENCY PEAK PERFORMANCE ECONOMY

#### REFRIGERANT DISTRIBUTORS

- Economical to Install
- Assures Equal Distribution
- Capacity Balanced to Load by Means of Interchangeable Nozzle
- Available as Separate Device to Permit Use of Standard Valves
- Provides Maximum Coil Efficiency

#### THERMOSTATIC EXPANSION VALVES

- Flare, Sweat or Flange Connections
- All Parts Accessible for Cleaning or Inspection
- From 1/2 to 50 Tons Freon

*The Only Thermostatic Expansion Valves with Selective Charges*

#### SOLENOID PILOT CONTROL

- Tighter Closing than Ordinary Solenoid Valves
- Economical to Install
- One Size Fits All Jobs
- Costs No More than a Ten Ton Solenoid Valve Regardless of Load
- Positive Liquid Line Shutoff

#### STRAINERS

- A Complete Line for All Purposes

# SPORLAN

## SPORLAN VALVE COMPANY

7525 SUSSEX AVENUE · ST. LOUIS 17, MISSOURI

## MINERALLAC "DUPLEX" JIFFY CLIPS

*Do it Faster... Better!*

Millions of "Duplex" Jiffy Clips have set an unsurpassed service-record for installing hanging pipe, conduit, B-X cable, coils, condensers, etc. One bolt or screw holds this ribbed clip. In zinc-plated steel or Everdur alloy.

SEND FOR LITERATURE AND PRICES

Specify  
**MINERALLAC**  
HANGERS, CLIPS,  
STRAPS, BUSHINGS

MINERALLAC ELECTRIC CO.  
25 North Peoria Street  
Chicago 7, Illinois

# MINERALLAC



## They'll Do It Every Time . . . . By Jimmy Hatlo



## Do You Have 'One Foot In the Door'?

For GREATER  
PROFIT... Sell

PAK-A-WAY

THE HOME FREEZER

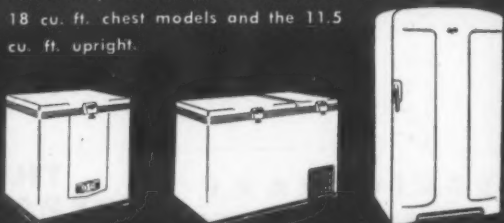
that has  
Everything

Including...

SEALED FIBERGLAS  
INSULATION

All Schaefer Pak-A-Way Home Freezers have five inches of sealed fibreglas insulation. This insulation, known for its high efficiency, is completely sealed in with Korite, which withstands lowest temperatures. This provides a permanent and positive seal against moisture penetration. An exclusive Schaefer Pak-A-Way feature.

Pak-A-Ways are made in 6, 12, and 18 cu. ft. chest models and the 11.5 cu. ft. upright.

POSITIVE CONTACT  
REFRIGERATION

Every inch of refrigerating coil in the Schaefer Pak-A-Way is permanently bonded to the inner tank, assuring positive contact resulting in high refrigerating efficiency and low operating cost. Only Schaefer gives you this important advantage.

and...AUTOMATIC  
BELL ALARM

Should the temperature in a Schaefer Pak-A-Way rise to 12° F., a warning bell rings automatically. Bell is independently powered by an 80-hour battery, and has a test switch to check battery condition. Standard equipment on chest models.

Take advantage of Schaefer Pak-A-Way advertising now appearing in such magazines as Better Homes & Gardens, Country Gentleman, Household, Successful Farming and others. And capitalize, too, on the reputation and experience of Schaefer, known for the finest in low-temperature refrigeration equipment, since 1929.

Schaefer  
MINNEAPOLIS

Also manufacturers of Schaefer Ice Cream Cabinets and Clearview Ice Cream and Frozen Food Merchandising Display Cabinets.

Write Today  
for details on available  
dealer and distributor  
franchises.

AN INTERNATIONAL INSTITUTION • SUBSCRIBERS ALL OVER THE WORLD

Trade Mark  
registered  
U. S. Patent  
Office;  
Est. 1926



Copyright  
1949,  
Business News  
Publishing Co.

F. M. COCKRELL, Founder

Published Every Monday by BUSINESS NEWS PUBLISHING CO.  
450 W. Fort St., Detroit 26, Mich. Telephone Woodward 2-0924.

Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$5.00 per year; 2 years \$8.00. All other foreign countries: \$7.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Please send remittance with order.

GEORGE F. TAUBENECK  
Editor and Publisher

PHIL B. REDEKER, Editorial Director

C. DALE MERICLE, Associate Editor

JOHN SWEET, Assistant Editor  
HUGH MAHAR, Assistant Editor  
GEORGE HANNING, Assistant Editor  
ROY DENIAL, Assistant Editor  
Editorial Assistants: MARGARET DEAN,  
MARGARET POMMERENING, LOUISE  
GINET, AND LORRAINE MAJOR

E. L. HENDERSON, Business Manager  
ROBERT M. PRICE, Adv. Representative  
ALLEN SCHILDHAMMER, Adv. Rep.  
ALLEN S. RUSSELL, Adv. Rep.  
BETTY JANE KING, Adv. Secy.  
YVAUGHN CRYSLER, Subscription Mgr.  
WALTER J. SCHULER, Production Mgr.

Member, Audit Bureau of Circulations. Member, Associated Business Papers.

VOLUME 56, No. 3, SERIAL No. 1,035, JANUARY 17, 1949

Television Finds a Natural Advertising  
Partner—Home and Farm Freezers

It was with joyous enthusiasm (and pride, too) that the editors of AIR CONDITIONING & REFRIGERATION NEWS greeted and granted the following request:

TELEGRAM

EDITOR: AIR CONDITIONING & REFRIGERATION NEWS  
REQUEST PERMISSION USE YOUR ANALYSIS ON FOOD FREEZER SAVINGS IN TELEVISION COMMERCIAL ON GENERAL ELECTRIC HOME FREEZER. PROGRAM IS CLEVELAND BASEBALL GAME. SPONSOR IS GENERAL ELECTRIC SUPPLY CORPORATION.

BATTEN, BARTON, DURSTINE & OSBORN, INC.

In our humble opinion, the BBD&O advertising men are "on the beam."

If ever there was a hand-picked, 100% receptive audience for the advertising message of any particular specialty product, it's this one. They're all prospects for freezers—the best prospects.

People who buy television sets today obviously are an unusual breed. Realizing in advance that television programs are still in the diapers stage, and that television production and transmission are far from being automatically perfect, they go ahead and spend several hundred dollars for a television set, anyway.

Why? Because they're pioneers. They're curious. They're the sort who enjoy being in the vanguard of progress. They thrill to new things and opportunities. They get a kick out of being the first family in their neighborhood to acquire an advanced product of American ingenuity. (And, of course, their rent is paid, the kids are clothed, and they don't have to hide from bill collectors when the doorbell rings.)

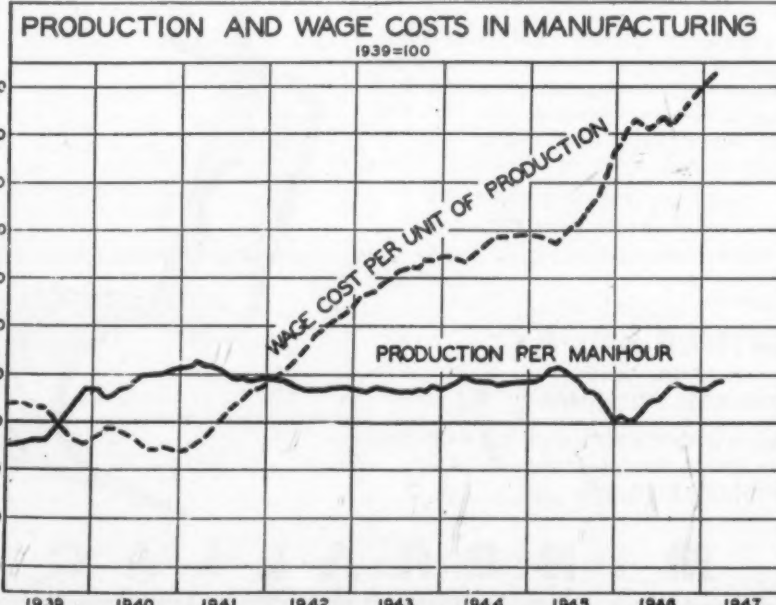
Owners of television sets comprise an ideal audience for home freezer advertising.

Not only are they patently receptive to new ideas and new home appliances; not only are they comparatively affluent and able-to-buy; not only are they progressive and imaginative and Proud Possessors.

In addition, they have evidenced, by their purchase of a television set, their eagerness to see some of the interesting things which are going on in the world.

As all sales and promotion managers of firms which produce home and farm freezers agree, freezers must be seen in action to be appreciated. Their advantages, their budget-savings, their "new way of life" must be demonstrated.

For this, television "commercials" are a natural—and their audience is a natural, too—for the promotion of this pioneering new specialty product, the freezer.





*Don't miss this!*

## INVITATION TO PROFIT

Visit  Booth 413-415 during  
the Heating Ventilating and  
Air Conditioning Exposition  
Chicago • January 24 - 28

*See the  
Complete Line of  
Dependable  
Controls for . . .*

- AIR CONDITIONING
- REFRIGERATION
- OIL
- GAS
- COAL-FIRED HEATING

**AUTOMATIC PRODUCTS COMPANY**

2450 North Thirty-Second Street • Milwaukee 10, Wisconsin



# DEPENDABLE *Controls*

FOR HEATING • AIR CONDITIONING • REFRIGERATION



## Du Pont Opens Chicago Field Service Laboratory To Aid Midwest Firms

CHICAGO—A field service laboratory to assist industries in the mid-west in handling their finishing problems has been opened by the du Pont Co. here.

It has facilities for spraying and baking refrigerators and other metal and wood articles, and a large work-room for preparation of panels and similar work. Other du Pont field service laboratories are located at Philadelphia, Pa., and Roanoke, Va. The Chicago laboratory is under the direction of William P. Fisher, Chicago regional industrial sales manager of the Finishes Div.

Located in a separate new building at the du Pont Finishes Div. plant at 2100 Elston Ave., the laboratory is stocked with many of du Pont's industrial finishes—both for use in the laboratory and as sample stocks for customers.

The spray room has a modern water-wash spray booth, the conventional drying racks, as well as an electrical baking oven with a temperature range from 100° to 500° F., large enough to bake refrigerators or other large objects.

The laboratory is staffed by experienced servicemen. It is available without cost to users or prospective users of du Pont finishes to make finishing recommendations and help solve actual production problems.

## Crosley Hints It Will Double '48 Ad Spending

CINCINNATI—W. A. Bleas, vice president of the Avco Mfg. Corp. and general sales manager of the Crosley division, has announced the appointment of Benton & Bowles, Inc., of New York as advertising agency for Crosley.

Benton & Bowles will handle the advertising and promotion of all Crosley products.

In announcing the appointment, Bleas stated that Crosley is embarking on a greatly intensified advertising and sales promotion program for 1949 and that the expenditure of factory funds for advertising in 1949 will more than double that of 1948.

## Appliance Ad Styled To 'Knock Hats Off'

ROCHESTER, N. Y.—Braun's appliance store at 900 Portland went after cash appliance business with a newspaper advertisement which read in large type:

"Pay cash and we'll give you a real price on a washer, stove, or refrigerator . . . one that will knock your hat off."

## Prokopf Elected President Of Queens Appliance Group

NEW YORK CITY—The Queens Electrical Appliance Merchants Association elected William Prokopf of Prokopf Electric in Maspeth, N. Y. its president at the annual meeting recently.

Other officers elected were: William Noah, chairman of the board; Frank Murphy, and George Pancoast, vice presidents; Marino Jeantet, secretary; and Percy Henriques, treasurer.

## Graybar Sets Contract For Office, Warehouse

ATLANTA—Graybar Electric Co. recently awarded a contract for construction of a new warehouse and office on North Ave., between Plum and State Sts., here.

A. D. Hammond, manager of Graybar's Southern district, said the new building will contain 60,000 sq. ft. of office and warehouse space. It will be of brick, fireproof construction, and will be completely modern throughout.

First floor of the new building will be devoted to warehouse space, while the second will be divided into offices. A city sales and pickup counter designed for the convenience of supply customers, an appliance showroom for dealer use, and a spacious customer parking lot adjacent to the building also are included in the plans.

Company officials said they would begin operations at the new location in late 1949 if construction proceeds according to schedule.

## Davey Heads Sales for No. American Distributors

MILWAUKEE—Allan C. Davey has been appointed national sales manager of North American Distributors, Inc., here, it was announced by W. H. Roth, president.

Davey will be in charge of sales of "Rad" granulated soap and "Snap" synthetic detergent to appliance dealers and department stores.

Since June, 1944, Davey has been sales manager of the Clark Division of McGraw Electric Co. Prior to that time, he was sales manager of Wisconsin Public Service Corp. for 14 years. He is a graduate of the University of Wisconsin.

## Self-Service Frozen Food, Dairy Items Featured by Kroger Store

MILLVALE, Pa. — Self-service dairy foods and frozen foods departments, employing extensive use of refrigeration, are features of the new Kroger store located on Lincoln Ave. here.

## Commercially Packaging Frozen Fish So as To Eliminate Odors and Yet Avoid Dehydration Presents Tough Problem

BIRMINGHAM, Ala.—"A frequent question that comes up is what to do with frozen fish that have defrosted in transit. As a general rule we tell them to look the stuff over, and if it isn't bad to refreeze it."

"But people will look at only one or two cases and judge the condition of a whole carload from them, or they will try to freeze the fish while it is still in cartons, forgetting that cartons are very good insulators."

This suggestion was among the comments made by J. M. Lemon, chief of the technological section in the commercial fisheries division of the U. S. Fish & Wildlife Service, in a discussion of "Storage of Seafoods" presented here recently at a training conference for warehousemen.

The conference was one of a series sponsored by the Refrigeration Research Foundation and, in this instance, the Southeastern Chapter of the National Association of Refrigerated Warehouses.

That considerable work is being

done with the problem of freezing fish at sea was indicated by Lemon.

"Fishing trawlers working out of the Boston area are two days out of port before they reach the fishing grounds, where they may spend seven days fishing. With the two days required to reach port this means that the fish caught the first day will be out of water for nine days. Fish often are permitted to lie on deck and then may be stored in the hold against the boiler room bulkhead. These fish may be of poor quality when landed."

"Lots of money would be involved in fitting these trawlers with refrigeration equipment so they could freeze fish at sea. The tuna people on the west coast freeze at sea, but, of course, they pack the tuna in cans. General Seafoods in New Orleans is now experimenting also with freezing shrimp at sea. To convert trawlers for freezing would cost from \$300,000 to \$500,000—at least, that's what the tuna boats cost," Lemon said.

Other tests on fish freezing and storage problems include that of first freezing the fish and then thawing for filleting, after which the fillets are refrozen.

"Fish processed this way has the same holding qualities as the fish that was first filleted and then frozen, but this method hasn't been commercially applied yet," he said.

"It is also very hard to package fish for freezing without leaving some air in the package. This leads to dehydration and freezer burn. In some cases, we can eventually get dehydrated fish this way."

"In oily fish there is also enough oxygen in these air spaces to oxidize the fish oil. With these you may get a 'kick-back' because oxidized fish oil is not readily digested. Fish

oil, however, will 'oxidize' without any oxygen being present. This is a chemical rearrangement, apparently."

"But packaging without entrapped air is almost an impossible problem. There's probably no perfect wrap, but we're checking all types in our laboratory right now."

"From a practical standpoint, what all this means is that fish must be very carefully handled—both in freezing and in storage," emphasized Lemon.

"Lots of people have had trouble with tightly packed cartons of frozen fish," he went on. "This is especially true with cartons stored against outside walls, and has caused some spoilage. Don't pack the carton too tightly so as to allow proper air circulation."

The problem of removing and counteracting fish odors in cold storage rooms was discussed by several of the warehousemen at the conference, and two of them reported that they had successfully removed these and other odors by using activated carbon odor removal units.

## Freezers Help Set Sales Record for West Penn Area Home Appliance Dealers

PITTSBURGH—Highest sales for any November on record were established for ranges, water heaters, clothes dryers, dishwashers, and garbage disposers in the southwestern section of Pennsylvania, the West Penn Power Co. reported recently.

The utility, with statistics gathered from 606 appliance dealers in the area south of Pittsburgh, also noted that freezers, ironers, dishwashers, and garbage disposers showed sales gains over October. November sales of ranges and vacuum cleaners held even with October.

Refrigerator volume was below both October and November, 1947 figures.

Unit volume sold during November as compared with October and with November, 1947 was as follows:

Appliance	Nov. '48	Oct. '48	Nov. '47
Refrigerators	1,197	1,326	1,477
Freezers	275	160	285
Dishwashers	49	38	27
Garbage Disposers	50	33	26
Ranges	821	822	777
Clothes Dryers	51	62	22
Ironers	265	244	350
Washers, Automatic	223	294	291
Washers, Conventional	1,304	1,489	1,325
Vacuum Cleaners	708	708	1,027
Water Heaters	381	465	367
Milk Coolers	13	11	13

## Gibson, Coolerator Sales Hit \$47,000,000

GREENVILLE, Mich. — In the regular annual statement issued Dec. 27, Charles J. Gibson, president of Gibson Refrigerator Co., reported total sales of \$47,659,023.33 for the year ended Sept. 30.

The sales total includes sales for both Gibson and its subsidiary, The Coolerator Co. in Duluth, Minn.

The report showed earnings for the year amounted to \$3,766,884, equal to \$6.27 per share of capital stock.

## Olean Co. Purchases New Site

OLEAN, N. Y.—Olean Household Furnishing Co., Inc. has purchased property at Seventh and West State for a reported price of \$50,000. Two brick buildings are on the site. Samuel Schneiderman is president of Olean Household Furnishing Co. which has been located at 406-8 West State for the last 24 years.

Since 1935

## Are YOU Conscious Of The Critical Meat Price Revolt?

Consumers are still rebelling against high prices (read the papers). That spells opportunity for you. Cash-in on the movement that will exist for several years. Build Locker Plants and Sub-plants NOW. Educate your public when they are price conscious and most receptive. Build for the future. Habits once formed are hard to change. Get on the beam—take advantage of it NOW and use



## MASTER FOOD CONSERVATORS

made by the "Spark-plug" of the Industry—whose interests are your interests and who dare to take time by the fore-lock and say "do it now."

## Stick To The Producer Who Thinks About Your Future

It doesn't cost you anything, but it will pay you BIG profits in the long run. Ask us why.

Endorsed by and sold through distributors of refrigeration and insulation.

**MASTER MANUFACTURING CORP.**  
121 Main Street  
Sioux City 4, Iowa

Member of Frozen Food Locker Institute, organized for your protection.

Over 1,500,000 Master Food Conservators in Use

## ANYTHING AND EVERYTHING YOU NEED

... In Refrigeration, Air Conditioning, Heating Parts and Supplies ... selected from our complete stocks ... the same day your order's received ... by competent experienced men. A can't-be-beat time and money-saving help for you!

THE SUPPLY HOUSE THAT SERVES THE WORLD • Wholesale Only

**SERVICE PARTS CO.**

2511 2611 LAKE STREET MELROSE PARK, ILLINOIS



Send for catalog today!

## OVER 300 TYPES OF RELAYS

Solve Your Special Relay Problems with These Standard A-B Relays



Bulletin 700 Relays can be supplied with pressed steel, general purpose enclosures, or without enclosures for mounting on control panels or in machine bases.

**ALLEN-BRADLEY MOTOR CONTROLS**  
for Air-Conditioning and Refrigeration.  
Manual & automatic across-the-line starters.  
Compression-type velvet-smooth starters.  
Pressure and temperature switches & controls.  
Relays and contactors from 1 to 8 poles.  
Push buttons and selector switches.



**ALLEN-BRADLEY**  
SOLENOID MOTOR CONTROL

Bulletin 700 Relays are small contactors built to the same high standards of ruggedness and performance as the regular Allen-Bradley line of motor controls. Over 300 different types are listed as standard, from 1 to 8 poles, with normally open or normally closed contacts. If you are developing a machine or installation requiring small but dependable magnetic relays, send for Bulletin 700/200 ... a gold mine of relay application data.

Allen-Bradley Co., 1313 South First Street, Milwaukee 4, Wisconsin.



# The KEY to AIR CONDITIONING

One of a series from  
by James J. LaSalvia

Readers who have any questions regarding the application of air conditioning are invited to write to Mr. LaSalvia, the author of this series, who will be pleased to furnish a complete and detailed answer free of charge. This is another of the services provided by the News.

## Automatic Controls (Cont.)

### TYPES OF ROOM CONTROLS

The type of room controls for air conditioning systems varies considerably, and depends on the type, size, and occupancy of the system. Each system must be regarded as a separate problem for control.

The following are the types under which each system may fall:

1. Single room (small).
  - a. Single thermostat.
  - b. Two-step thermostat.
2. Single room (large).
  - a. Single thermostat.
  - b. Two-step thermostat.
3. Zone control (two or more thermostats).
  - a. A thermostat in each room.
  - b. Zone control (two or more thermostats).
4. Multiple-story building.
  - a. A thermostat in each room.

### Solenoid Valve Control

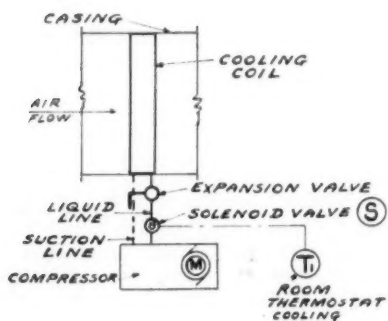


Fig. 17—This hookup is similar to that of Fig. 16, except that the thermostat controls a solenoid valve in the liquid line to the coil.

### Outdoor Thermostat Added

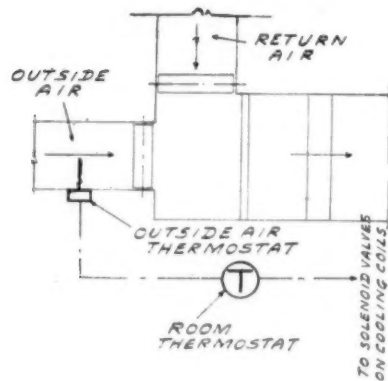


Fig. 18—By adding an outside air thermostat and using an automatic room thermostat, compensated control can be substituted in Figs. 16 or 17.

## Electrimatic

Valves, Driers, Strainers, Charging Lines, Quick Couplers, Forged Flare Nuts and Fittings

Ask Your Wholesaler

Electrimatic

2100 Indiana Ave. • Chicago 16, Illinois  
Canada—2025 Addington Ave., Montreal

SEE (Model) "U"  
(Universal)

EVAPORATIVE CONDENSERS

(Manufactured in Sizes 10 to 125 T.R.)

AT 9TH H. & V. EXPOSITION, BOOTH No. 412

BALTIMORE AIRCOIL COMPANY, INC.  
715 WEST PRATT STREET • BALTIMORE 1, MD.

### Simplest Control Employs Single Manual Thermostat

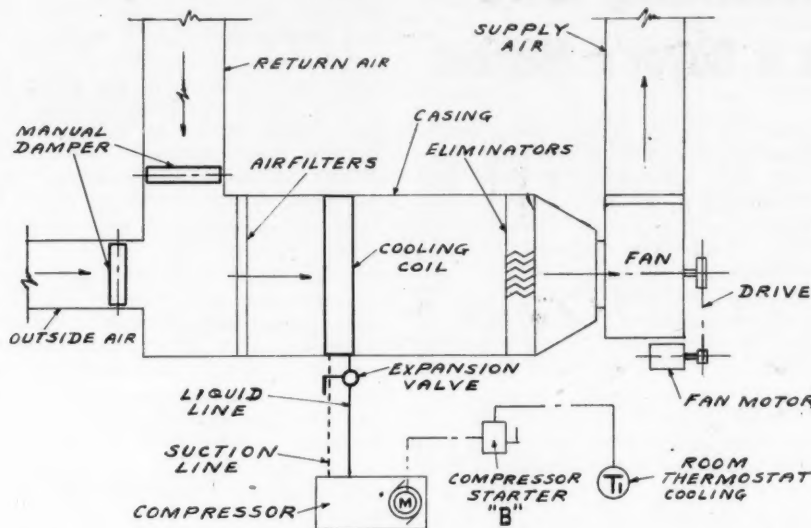


Fig. 16 shows diagrammatically the simplest control that should be used for an air conditioning system. A single manual setting thermostat (T<sub>1</sub>) regulates the operation of the compressor motor starter (B).

pressor motor starter (B) so that when room temperature falls below the setting of the thermostat (T<sub>1</sub>), it opens the electrical circuit to motor to stop compressor. When room temperature rises above setting of thermostat, the electrical circuit is closed to start compressor.

2. Manual damper control in outside air duct.
3. Manual damper control in return air duct.
4. Single compressor.
5. Single cooling direct expansion coil.

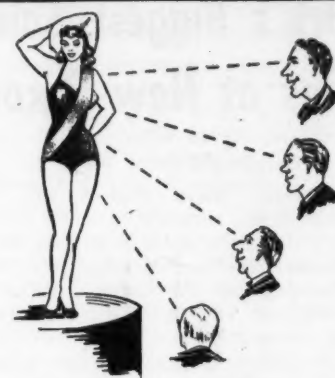
Fig. 17 shows another method of simple control which can be used instead of method shown in Fig. 1:

The room thermostat (T<sub>1</sub>) is wired to a solenoid valve (S) instead of the motor starter, and the rest of the controls are the same as in Fig. 1.

Fig. 18 illustrates the compensated dry-bulb temperature control which can be added to either Fig. 16 or Fig. 17 by merely changing the room thermostat from manual to automatic and adding an outside air thermostat to set automatically the room thermostat higher or lower to correspond with outside temperature.

One outside thermostat can set from one (1) to five (5) room thermostats at the same instant in the same sequence.

(To Be Continued)



A Good Figure  
ATTRACTS  
Attention

HERE'S ANOTHER  
GOOD FIGURE!

THAWZONE  
PATENTED  
The PIONEER FLUID DEHYDRANT

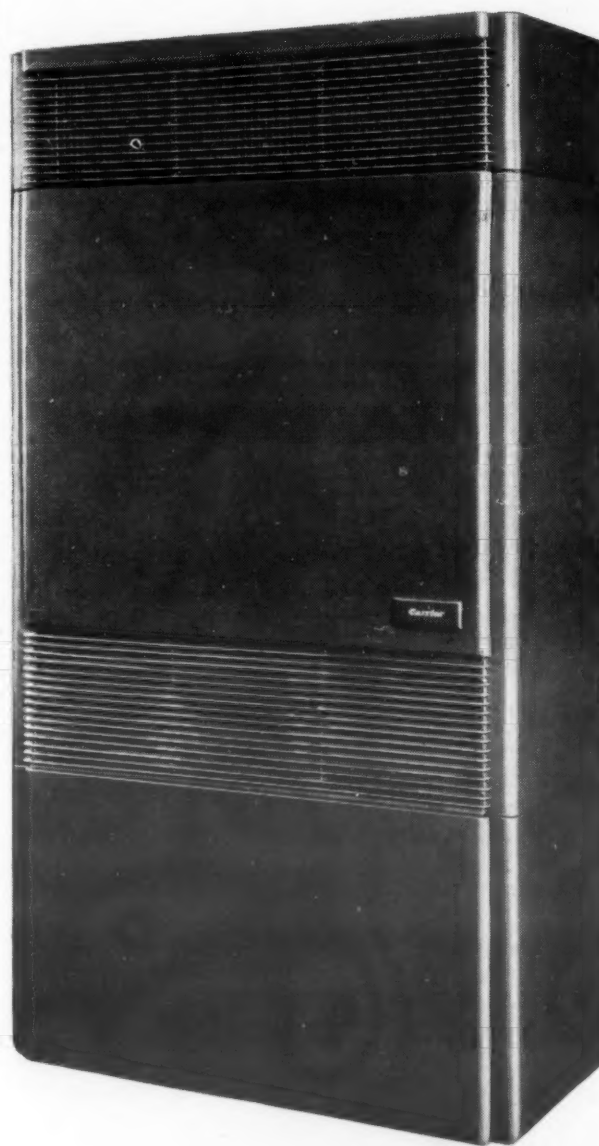
COSTS  
ONLY

8¢

PER  
POUND OF  
REFRIGERANT

Figure based on pint quantities. Only slightly higher for smaller quantities.

HIGHSIDE CHEMICALS CO.  
195 VERONA AVE. NEWARK 4, N. J.



# The Carrier Weathermaker is a money-maker

### 8 Features That Make It a Best Seller:

- MORE COOLING PER DOLLAR
- LONGER LIFE, LOWER UPKEEP
- TAKES LESS FLOOR SPACE
- QUIET OPERATION
- A MODEL FOR ANY SIZE STORE
- STREAMLINED AND HANDSOME
- INSTALLED WITHOUT FUSS
- GIVES ADDED PRESTIGE

It's a money-maker for you because it incorporates everything your customers want in an air conditioning unit. And it's a money-maker for them because, at low upkeep, it provides the kind of air conditioning that attracts traffic to their stores.

Your selling points? Check them over again and remember this—the "Carrier" name is a mighty big one to start. For years Carrier has produced the finest in air conditioning—and this unit lives

up to its name. Self-contained, compact and good-looking, it offers quiet, dependable service for years—air cooling, dehumidification, cleaning and circulation.

To help you step up your sales, Carrier is backing the Carrier Weathermaker with forceful advertising and promotion. It pays to tie up with the leader in its field—tie up with Carrier! Write for details. Carrier Corporation, Syracuse, New York.

Carrier

AIR CONDITIONING • REFRIGERATION • INDUSTRIAL HEATING



## York's Biggest Sales, Advertising Drive Aims at New Record In a Buyer's Market

(Concluded from Page 1)

Although there was a 20% increase in the number of York outlets last year, more dealers will be added this year, Lauer indicated.

Backing up the drive will be an advertising and promotion program said to be the largest in the company's history, perhaps the largest ever seen in the commercial refrigeration industry, York officials believe.

The whole program will be "calendared" for the year, the advertising and program at both national and local levels being closely scheduled to tie in with the timing of the overall sales drive mapped out for the coming year.

Planned is the largest daily newspaper cooperative advertising program ever attempted by York, plus advertising in 37 trade and professional magazines, five national consumer magazines (*Time*, *Fortune*, *Newsweek*, *Business Week*, and *Saturday Evening Post*), and a direct-mail campaign which calls for three huge mailings during the year direct from York headquarters.

Details of the promotion were outlined by John S. Garceau, recently appointed director of advertising and sales promotion, and J. Donald Smith, York's manager of advertising.

W. E. Landmesser, manager of resale sales, and D. C. Seitz, manager of franchise sales, play active roles

in the two-hour show York is staging to present its program for 1949. Garceau also participates, along with two professional actors, in the show.

Three improved models of Yorkaire room air conditioners are being displayed at the meetings, a ½-hp. window model priced at \$350, a ¾-hp. window model listing at \$400, and a ¾-hp. console type priced at \$660. All prices are f.o.b. York, Pa.

Room conditioners are only one of the several York products being emphasized in this campaign, which also includes refrigeration machines, the larger self-contained Yorkaire conditioners, frozen food cabinets, and the company's two types of self-contained ice-making equipment—the Flakeice and the automatic ice cube machine.

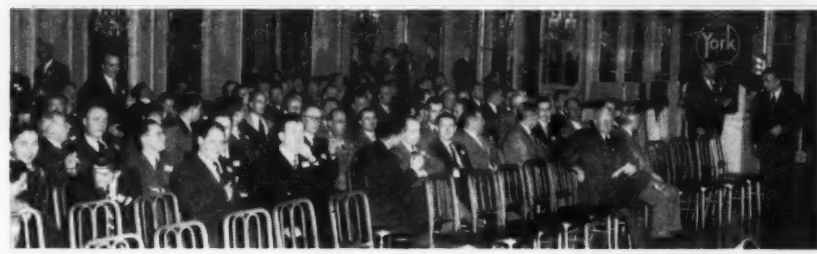
The last two are receiving first emphasis in the national advertising program.

To open the show at Philadelphia, York's president Lauer told the 200 distributors and salesmen that "1949 marks the culmination of several years of planning. Our \$8,000,000 building and retooling program is now in operation, and in our planning of this our faith in the future of the air conditioning and refrigeration industry has never wavered. I know that you men can sell all we produce."

(Lauer and John Hertzler, vice president and general sales manager, are dividing assignments on these distributor meetings.)

The need for return to specialty selling was strongly emphasized throughout the York presentation. First act of the show featured the two professional actors, one playing the role of a veteran specialty salesman; the other being his son just

## Distributors Get 'Pitch' from York Officials



York distributors all over the country are being assembled for two-day sessions like this one at Philadelphia where a crew of company officials and professional actors dramatically present a "Proposal for Profit," to outline York's ambitious sales program for 1949

starting into the game.

"Specialty selling by trained men," the father declared, "is the only answer to the problems that are ahead of us today."

Walter Landmesser, in the second scene, points out to the young would-be salesman that York is basing its "entire 1949 program on sales training" and the other promotional helps scheduled.

"Every distributor is going to hold weekly sales training meetings," he added, explaining that York will parcel out to distributors the suggested training course in weekly installments.

In starting out York's presentation of its product story, Dean Seitz outlined the four steps any specialty salesman should follow in preparing to sell a product. The salesman, he said, has to answer these questions:

- "1. Whom can I sell the product to?"
  - "2. Why should anyone buy any such product?"
  - "3. Why should they buy mine?"
- "And then," said Seitz, "go out and start ringing doorbells and selling."

### FEATURES OF UNITS

To promote the first product on York's list—refrigeration machines—Seitz suggested that emphasis should be put on "two outstanding features that put money in customers' pockets." These features, which "guard against burned out bearings," are:

1. Double-trunk pistons, the upper trunk having a sealing ring to keep the refrigerant on top, the lower trunk having an oil-sealing ring to keep the oil in the crankcase.
2. "Centriforced" lubrication of compressor bearings.
- Turning to the subject of room conditioners, Seitz listed several features for the restyled and improved models, emphasizing:
1. Their finish harmonizes in any room.
2. Weight has been reduced 20%.
3. Positive control of air movement for both recirculated and outdoor air.
4. Adjustable outlet louvers.
5. Trap lid for pumpouts, the unit being able to exhaust the air in a room in two minutes, it is claimed.
6. Filter located in front to filter recirculated as well as outside air.
7. Insulated plenum.
8. Squirrel-cage blower fan.
9. Simple, three-position switch for (a) cooling, (b) ventilating, (c) off.
10. Increased capacity (7,700 B.t.u. in the ½-hp. model) at less cost.
11. Bigger condenser.
12. Two condensate pans, one in the front and one in the back. Water from the front pan runs to the one in the rear where the condensate is blown against the condenser and makes it, in effect, an evaporative condenser.
13. Five-year warranty is offered on the hermetic system with a one-year warranty on the conditioner itself.

### 'THEY HAVE TO BE SOLD'

As for the larger Yorkaire store-type conditioners, Landmesser told the distributors that "people today accept air conditioning as something they want, but there's no great rush by businessmen to buy them. They have to be sold."

Among the features to be stressed in selling this line, Landmesser said, were the unit's adjustable outlet grilles, location of air intakes on sides and back, ruggedness of the unit, oversize coil with staggered tubes and corrugated fins, big condenser, and oversize fan and fan motor.

At this point in the show there was a clever scene in "black light" with animated figures portraying heat, moisture, dust, and a "judge," who finally passed sentence condemning the three "criminals to the Yorkaire for life."

On frozen food cabinets Seitz told the distributors there were two main



S. E. Lauer (right), York's president, here introducing W. E. Landmesser, manager of resale sales, to the Philadelphia group, emphasized that "prewar specialty selling will have to be revived and rejuvenated."

questions of prospects to be answered: "Why buy any?" and "why buy York?"

Emphasis was placed on York's model 350 upright home freezer, and the presentation included a blowup of a very recent advertisement in the *Saturday Evening Post* citing the \$515 annual savings available to the user of this 33-cu. ft. cabinet. How York arrived at this savings figure is shown in the accompanying table, which was part of the advertisement.

Advantages of using ribbon ice in retail displays of produce and fruit were stressed by Landmesser in outlining the sales prospects for the York Flakeice machine. Other potential applications for ribbon ice and this machine are in bakeries for dough mixing, sausage manufacturing for grinding operations, display and shipment of flowers, poultry, fish, celery, and the like, and several others.

Savings to the user is the big point in selling the automatic ice maker, York distributors were also told. This machine, York claims, will always make possible 40% savings on ice purchases a year, sometimes as much as 50% and 60%.

Backing up these sales plans will be York's huge promotion program which John Garceau outlined to the distributors.

### TIMING OF ADVERTISING

"This campaign represents an important change from advertising of the past because of its timing," he said. "National advertising will be keyed to the national sales program."

In February and March York will emphasize the Flakeice and automatic ice maker; beginning in March and running through part of June, air conditioning, with room conditioners getting special emphasis from the end of April through July; low-temperature storage promotion will begin at the end of June.

The whole promotion program, Garceau explained, includes:

1. Sales training.
2. National and trade advertising.
3. Direct mail.
4. Display suggestions.
5. Radio advertising.
6. Local telephone and direct mail.
7. Sales planner books.

The first "sales planner" book for distributors and dealers will cover the self-contained ice-making equipment, containing such things as booklets with suggestions for weekly sales meeting topics, and a calendar showing when and where national advertising and national direct-mailing pieces will be sent out.

Final scene of the show outlined York's "Hall of Fame" program whereby outstanding salesmen will be awarded a gold ring with diamonds.

## York Figures Freezer Can Save \$515 Annually

SUGGESTED FOOD CONTENT FOR MODEL 350

Product	Weight (lb.)	No. Packages	Normal Price*	Low Price†	Dollar Savings	% Savings
Meat	265	105	\$219.95	\$174.90	\$ 45.05	20.5
Poultry	110	24	88.00	72.60	15.40	17.5
Sea food	67	70	41.54	33.50	8.04	19.4
Vegetables	336	425	141.12	104.16	36.96	26.2
Fruits	272	310	87.04	68.00	19.04	21.9
Juices	80	210 cans	53.60	40.80	12.80	23.9
Ice cream	126	12-2½ gal.	90.72	65.52	25.20	27.8
Prepared foods	94	85	47.94	38.54	9.40	19.7
<b>Total</b>	<b>1,350</b>	<b>1,241</b>	<b>\$769.91</b>	<b>\$598.02</b>	<b>\$171.89</b>	<b>22.3</b>

By stocking the York 350 in accordance with the above chart three times a year, annual savings can amount to \$515.67.

\*Based on single unit purchases. †Based on quantity and seasonal purchases.

# Your Equipment is NOT COMPLETE without . . . .



## THE MIDGET PURGER

The Midget is the companion or sister product to the Little Giant Purger. The Little Giant, previously introduced, is for purging the larger units, but the Midget is a low cost, water cooled purger designed for economical operation for the smaller or fractional units up to 10 hp.

The Midget Purger provides positive and complete purging of the refrigerating system with minimum loss of refrigerant.

Purging is an operation familiar to all refrigeration men. With the standard purging facilities it is usually impossible without an appreciable loss of refrigerant.

When non-condensable gases are present in a refrigerating system, it will operate at higher pressures than if these gases were not present. Unnecessarily high pressures result in the compressor being subject to:

Higher bearing loads. Higher discharging temperatures. Increased wear on moving parts. Greater power consumption.

### HERE ARE THE ADVANTAGES OF PURGING WITH THE MIDGET PURGER

**THERE IS NO GUESSING**—By bleeding off the gases through the purge valve until the liquid rises to the top, you have a positive indication when purging is completed.

**MINIMUM REFRIGERANT LOSS**—The air in the system is completely separated from the refrigerant before the purge valve is opened.

**SIMPLE TO OPERATE**—All operating valves easily accessible. Not necessary to check pressures or temperatures. No need to shut down the system.

**POWER SAVINGS**—Power savings, due to a reduction in head pressure will pay for the "MIDGET PURGER" many times over.

**MANUAL OPERATION**—Fully manually operated, there is no possibility of a slow leak developing which would cause a loss of refrigerant before the trouble is located.

ORDER THROUGH  
YOUR WHOLESALE

MUELLER BRASS CO.  
PORT HURON, MICHIGAN



## INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

### Multiplication vs. Division

Capitalism multiplies wealth. Socialism divides it. Capitalism gives every man a chance and an incentive to acquire more, produce more, dream more. Socialism takes away some of your possessions while insinuating that you should do less, have less, and think less because the world's goods and talents aren't divided up equally.

It capitalizes resentment, and glorifies laziness. Although capitalism may award its blessings unequally, socialism guarantees that everybody will share poverty.

Even a kindergarten urchin should be able to figure out that the only way he can have more paper dolls is to cut out more. But progressively, in "modern" schools, he is taught not to cut out his own paper dolls, but to wait his turn until teacher gives him one or two.

Obviously teacher can't snip enough paper dolls by herself to make everyone in her class happy. So she takes dolls away from those who have made them because they felt like it, and gives this surplus to those who have been too lackadaisical or too dull to fashion them for themselves.

In government circles, that's known as "ability-to-pay" taxation.

Like the kindergarten teacher, government can't produce or create very much. It can only tax or borrow or inflate the currency (take away from somebody else).

All three methods of throttling the lifeblood-circulation of capital acquisition and investment reduces the standard of living (the number of available paper dolls) for all concerned.

By destroying the urge to get-ahead through confiscatory taxation and inflationary borrowing, a socialist government inevitably will submerge the possibilities of prosperity for everybody.

When bureaucracy is rampant, nobody benefits except those who are on government payrolls—and even the "pork choppers" don't live hand-somely.

In time, if entrenched bureaucracy remains in the saddle, the entire economy will stagnate.

The hard workers and bright innovators can't save up enough capital to start new enterprises or expand old ones, because most of what they earn is taken away from them. And old-timers who have "made their mark" are forced to watch the steady deterioration of their assets while nincompoops undo (through sheer ineptitude) the built-the-hard-way assets which these veterans have constructed.

When profits aren't taxed away, they're ploughed back into new equipment, research and promotion—all of which create jobs, enlarge incomes, and raise real wages. That is Free Enterprise.

### Emotional Economics

But "pinko" teachers don't see things that way. Piqued by occasional examples of lesser-educated men who have made more money (like taxi-cab drivers, coal miners, or street cleaners—all of whom do dirty work to which the teachers wouldn't stoop) these malcontents decide that profits *per se* are objectionable. To them, profits mean higher prices, lower salaries, and richer capitalists.

If they could only have their way, all goods would be sold at cost by the holy "state." Then there'd be

nothing left for scientific experiments, engineering developments, market studies, sales training, or incentives for artificers or the dirty-workers to do more than just enough to "get by."

Moreover, there'd be no "cushion" to absorb losses. The socialist-inspired teachers forget that losses as well as profits occur in all businesses.

In good years, prescient business men set aside reserves to tide them over the lean periods. If they don't they'll go broke. And when business men go broke, employees lose jobs.

### Biting the Hand that Feeds Us

That nonpareil fount of wisdom, the Bible says: "The poor we have with us always."

This is a distressing thought, and the Utopian professors refuse to believe the Bible on this score.

Nevertheless, it has been true in every period of history, on every square mile of the globe, and under every conceivable type of social organization, that some families enjoy luxuries while others are ragged and hungry.

Luck, the willingness to work hard contrasted with sluggishness, and the natural law of the Survival of the Fittest combine to make this so.

It is also true that in every clime and age sensitive individuals who are luckier or brighter or more industrious than less-endowed citizens have tried to alleviate the sufferings of the poor.

But never in any country or at any time have the "poor" been so well off as they are in the United States of America today. Roosevelt's patronizingly dubbed "ill-housed, ill-fed, ill-clothed" Americans actually are "living off the fat of the land" in comparison with the citizens of Russia, tattered Europa, all the Asiatic lands—yes, and even proud old England.

When teachers and writers and preachers and slingers tell our youngsters that tried-and-found-wanting Old World measures should be imported over here in order to help the underprivileged, unwittingly they are advocating that our poor people should be made poorer.

Old World collectivism (feudalism, monarchy, socialism, communism) holds people down. It stunts growth, nips progress in the bud, and cements economic and political strata.

The sort of thing which communism-tainted teachers espouse is just what our ancestors in 1776 sought to rid themselves of in their Declaration of Independence.

### It Was True Then; It's True Now

Those rugged and ragged individualists who wrested America away from the Indians and the wilderness, from the British and the French, came over here (1) to escape oppressive government and taxes, and (2) to obtain freedom of religious worship and personal action.

While proclaiming their freedom from oppression and for liberty of personal errandism, they also established a free market for their goods and services. Political and religious liberty led inevitably to economic liberty. (These freedoms are inseparable).

America's evolution of the free enterprise system came about naturally, rather than by design or intent.

And, all unbiased historians agree, America's Free Enterprise System has been the supreme factor in our mastery of natural resources, and in the magnification and multiplication of every American citizen's comfort and well-being down through succeeding generations.

What have we done so well? The answer to that question is simple:

In a free market the customer is

the boss. If he doesn't like the looks of a product or its purveyor, he won't buy. If he decides that the price is too high, he won't buy. If he got a raw deal the last time he bought something from a commercial concern, he'll never go there again.

So it is that a free market polices itself. The consumer bosses the producer. And that latter, if he wants to stay in business, had jolly well better turn out better and better products and services at lower and lower prices.

If he can do all that, the consumers will pay him well. He may even get rich!

### Success Is Suspect

"Intellectuals" don't like to hear that a dumb sort of fellow might make a lot of money by working harder and longer to please his customers. No man should ever get rich, they are inclined to think. Everyone should work for the State, and receive a stipend dictated by an all-powerful committee located in Washington.

To prevent hard workers and consumer-pleasers from making more "dough" than the shirkers and the surly and the unfortunate casualties of Fate, subscribers to socialistic theories would substitute State Planning and Wealth Division for capitalism and the God-given chance-to-get-ahead.

Realizing that they are impotent themselves, they'd commit almost any crime—including arson, mayhem and murder—to frustrate or even obliterate the ambitious individuals of our age. The end justifies cruel means, they believe.

To their warped minds, confiscatory taxation is the grandest idea of all time. But if that doesn't work, they'll resort to violence. Whatever it takes to pare down the successful to the level of the "little fellow," they're for—whole-hog.

So it happens that the lazy, the congenital gripers, and the just-plain-dumb vote for Government Control not only to protect their own insufficiency, but to stifle the aims of the Real Progressives. Furthermore, they proselyte defenseless, wet-behind-the-ears schoolchildren to their cause. Armed with viciously one-sided propaganda, they ram their defeatist philosophy down the throats of your children, and mine.

And when a sufficient number of those June graduates whose minds have been warped by calculating professors have their say at the polls, America won't be America any more. The advocates of a Police State will destroy the concept of freedom for hundreds of years unless alert parents checkmate them.

If parents continue to neglect their children by caring naught what they are taught, several years from now life will be like this in the United States:

Instead of the customer doing his own choosing, the voted-in government will exercise untoward life-or-death powers over the "little man" after the State Planners take over the reins.

The Planning Executive will order each young man to work a certain job, receive a certain hand-out of paper dollars, and spend that phoney money for certain things.

Although they didn't intend it to turn out this way, believers in government planning have resurrected

the concept of traditional nobility and the Divine Right of Kings.

Planning connotes order. And order means command. Commanding is dictating. And since a dictator must order people to do things or not do them, to keep his job, the dictator becomes, in essence, a King.

"All power corrupts; and absolute power corrupts absolutely." So the cycle turns its full revolution, and soon we'll be back again in the "dark days" of the Middle Ages if we don't watch our step.

Monopolies of any variety can keep men from working when they want to, can force needy folk to buy items they must have at prices they can't afford, or impel them to pay taxes for the support of idlers who cling blindly to party doctrines and to the coattails of tongue-in-cheek demagogues.

That's an unpretty picture, but it's a candid photograph of life in Soviet-controlled lands today.

Furthermore (and how we hate to admit it) the philosophy of Government Monopoly has been sold to the up-coming generation of American voters, because we fathers have been "too busy" to counteract the Communist propaganda put out by left-wing teachers.

We fathers knock ourselves out to build up estates, and to pay insurance premiums for the benefit of our children. But if the Communistic Way takes over America, too, estates and insurance policies will be worthless.

It could happen here, too, just as it has happened in older nations. Isn't the job of education, then, more important than anything else?

(To Be Continued)



**SMALL BUT...**

**MIGHTY**

**PEERLESS**

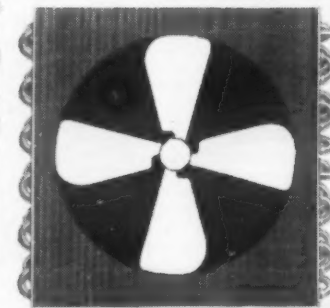
**PIE PLATE COIL**

**AVAILABLE TO MANUFACTURERS ONLY**

● The small size of the PEERLESS PIE PLATE COIL makes maximum space available in Vending Machines and Beverage Coolers for merchandise and essential mechanical apparatus. This Power - Packed round coil works most efficiently because ALL fin and tube surface is utilized. The one-third of waste surface found in the ordinary square coil is eliminated, thus improving the evaporator design. Manufactured for all types of cooling applications such as Direct Draw Bars, Soda Fountains, Reach-In Refrigerators, and Candy Cases. Install the PIE PLATE COIL and save valuable space, at the same time reducing the cost of the refrigerating system in your product.

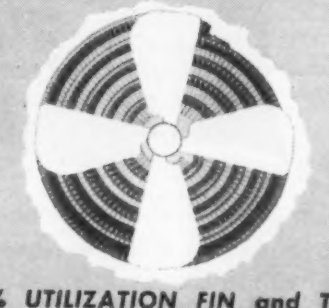
ALSO USED FOR CAR HEATERS AND WINDSHIELD DEFROSTERS

**THE ORDINARY COIL**



BLACK — COIL USED  
GRAY — COIL WASTED

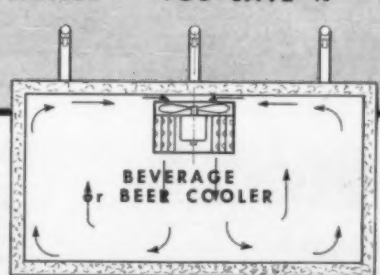
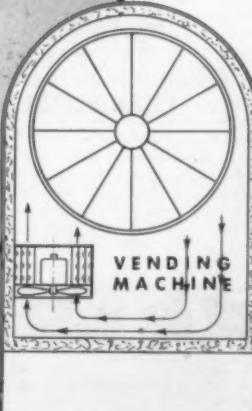
**THE PIE PLATE COIL**

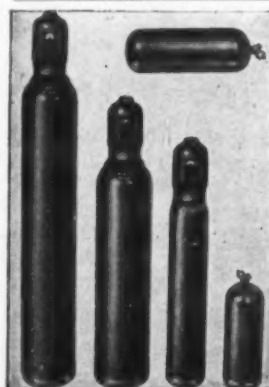


100% UTILIZATION FIN and TUBE  
SURFACE — YOU SAVE 1/3

WRITE FOR FURTHER INFORMATION

**PEERLESS of AMERICA, Inc.**  
2901 LAWRENCE AVE. CHICAGO 25, ILL., U.S.A.



### "SEAMLESS" REFRIGERANT CYLINDERS

Built and stamped to ICC 3B-300 specifications. Seamless construction of heavy gauge metal. Tested with hydrostatic pressure. Extra large capacities. Glossy red prime lacquer finish. Supplied complete with valves, caps, etc., as required. Improved "ERECT" style in 5# size.

ASK YOUR WHOLESALER!  
**Fine PRODUCTS COMPANY**  
185 NORTH WABASH AVENUE • CHICAGO 1, ILLINOIS



**POSITIVELY  
WILL NOT CLOG**



**"Cross-Flow" DRIER-FILTERS**

Eliminate pressure-drop troubles with Cross-Flow Drier Filters' exclusive new principle of flowing the refrigerant uniformly and slowly across a thin, cylindrical drying agent bed instead of forcing it thru a long powder-clogged bed. Capacities: Liquid Line— $\frac{1}{4}$  to  $\frac{1}{2}$  HP; Low-side— $\frac{1}{4}$  to 15 tons (Freon 12); Suction Line— $\frac{1}{4}$  to  $\frac{3}{4}$  OD.

**REMCO INCORPORATED**  
ZELLENFELD, PA.

**Kelvinator**



**Cooling Cure for Thirsty Throats**

Sell the name that sells itself... with Kelvinator-refrigerated Electric Water Coolers. Sizes and models for every requirement. Write.

**The EBCO Mfg. Co.**  
TOWN and LUCAS STS.  
COLUMBUS 8, Ohio

Available from 1/2 to 10 H.P.

**CLEANABLE  
DOUBLE-TUBE  
COUNTER-FLOW  
WATER-COOLED  
CONDENSERS**

Write for literature

**Halstead & Mitchell**  
BESSEMER BLDG.  
PITTSBURGH 22, PA.



## Mexican Market for Refrigeration Equipment Evaluated; Distribution of Sales Outlined

By Eugene Heszy, International Market Analyst

We have tried to show in our first article on Mexico that our southern neighbor is full of young energy and has at present a good leadership. At the same time, it was emphasized that the country is not one economically integrated unit.

The modern centers of commerce and industry are surging ahead, building up industry and means of distribution comparable to those of the United States, but, of course, on a smaller scale.

In order to obtain a clear and quick picture of what the business possibilities in Mexico are we may refer to the automobile population, a very good indicator for commercial potentialities.

The entire country of Mexico had

at the time of the outbreak of the last war and has at present the automobile population shown in Table 1.

Where are the main concentrations of business? Mexico City is the center of trade, and again using the automobile as a lead, we find that the Federal District, which contains the capital, possesses over one third of all mechanical transportation.

The other main commercial centers of Mexico are the cities of Monterrey, Nuevo Leon, over 5% of all automobiles; Chihuahua and Ciudad Juarez, Chihuahua, nearly 6%; Guadalupe, Jalisco, nearly 5%; Leon, Guanajuato, over 2%; Mazatlan, Sinaloa, over 1%; Merida, Yucatan, 1½%; Puebla, Puebla nearly 4%;

Table 1—Automobiles in Mexico

Year	Passenger Cars	Trucks	Buses	Total
1940	80,000	19,020	6,450	105,470
1947	126,000	77,500	11,500	215,000
1948 (January)	138,150	85,000	15,000	238,150

Table 2—Mexican Imports of Electric Refrigerators in Dollars

Country of Origin	1938	1939	1940
U.S.A.	150,000	440,000	720,000
Germany	under 1,000	1,000	.....
Sweden	.....	.....	14,000
Total	151,000	441,000	734,000
	1941	1942	1943
U.S.A.	1,440,000	400,000	588,000
Other countries	.....	nominal	nominal
Total	1,440,000	400,000	588,000

Table 3

### Principal Users for Commercial Refrigerators and Equipment Up to 1 Ton, and Parts Thereof

	Percentage of Sales
Meat markets	20.0
Grocery stores	16.0
Restaurants and hotels	14.0
Ice cream, etc.	11.0
Hospitals	10.0
Beverage cooling	14.0
Milk cooling & dairy products	5.0
Industrial	3.0
Water cooling	3.0
Clubs	2.5
Ice making	1.5
Total	100.0%

### Refrigeration Equipment over 1 Ton, and Parts Thereof

Industrial	22.0
Brewing industry	20.0
Cold storage, dairy products	20.0
Cold storage, fruits and vegetables	13.0
Cold storage, fish	10.0
Bottling plants, water cooling	8.0
Cold storage meat and slaughterhouse	7.0
Total	100.0%

### Air Conditioning Equipment, Self-Contained Units, and Parts Thereof

Meat markets, dairies, restaurants, hotels, food storage	22.0
Beverage cooling, soda fountains, florist cabinets, etc.	33.0
Theaters, etc.	15.0
Transportation	5.0
Industries	25.0
Total	100.0%

had recognized the seriousness of this trend in 1947 and had restricted imports. The general intention of the government has been and is to allow parts for assembly and for replacement to enter the country.

This is a clear encouragement for the construction of assembly plants within the country, thus employing Mexican labor and partly Mexican resources.

These government measures alone would not be enough to repair the formerly excellent markets for the American product. The key to a definite improvement of the foreign exchange situation is the petroleum industry and American travelers' expenditures.

The Mexican government has done everything in its power to encourage American oil companies to continue the petroleum development of the country which was more or less interrupted since the expropriations in 1938.

These endeavors by the Mexican government and several of our larger oil companies appear to be crowned with success.

The ultimate effect upon the permanent improvement of the Mexican foreign exchange situation will depend upon the behavior of the rather radical petroleum industry labor union, which, so far, has been kept under control.

If the United States government continues its firm policy towards extreme leftist elements in this country, then the partly communistic leadership of some of Mexico's labor unions will continue to be condemned to its present impotence.

We may then look out for a bright economic future in our southern neighbor.

Table 4

### United States Exports of Commercial Refrigeration and Air Conditioning Equipment and Machinery to Mexico, 1938-45

Year	Commercial Refrigeration Units, Equipment & Parts	Ice Making Equipment & Parts	Air Conditioning Units, Equipment & Parts
1938	\$ 189,472	\$ 25,704	\$ 21,956
1939	183,710	39,283	65,148
1940	249,765	67,736	120,292
1941	777,743	64,976	93,083
1942	267,120	9,133	53,572
1943	217,836	43,512	25,078
1944	565,326	165,225	49,356
1945	1,298,788	371,200	196,893



**KOLD-HOLD**  
builds better plates for every application

There are two big reasons why you can count on the performance of Kold-Hold Hold-Over and evaporator plates for every refrigerating installation.

FIRST: They are designed and engineered primarily to refrigerate efficiently and economically.

SECOND: They are built with care and to quality standards which assures that each and every Kold-Hold plate does its designed job to the fullest degree of satisfaction. Before any plate leaves the factory it is pressure tested under water and completely dehydrated.

This combination of engineered design and controlled construction is your best guarantee of peak performance.

Would you like to know more about how Kold-Hold plates can be used for quick freezing, chilling and holding, short period cooling, or for "Hold-Over" truck refrigeration? Complete descriptive literature is yours free — write today!

**TRUCK PLATES**

**PACKING UNIT**

**HANGER BANK**

**CONVERSION UNIT**

**MEATS**

**FOOD LOCKERS**

**PLATE STAND**

**LINER**

**TRUCK**

**KOLD-HOLD**

Jobbers in Principal Cities

protects every step of the way

STORAGE

KOLD-HOLD MANUFACTURING COMPANY - 500 E. HAZEL ST., LANSING 4, MICHIGAN



## Rogers Corp. Will Cover Southern Area for Airtemp

CHARLOTTE, N. C.—With Curt L. Rogers as president, Rogers Air Conditioning Corp. has opened for business at 831 N. Tryon. The new firm is dealer and distributor of Chrysler Airtemp products for air conditioning, heating, and refrigeration.

Rogers said the company will feature sales, service, engineering, and installation, with associate dealers to be named in the principal towns throughout the firm's sales territory.

The latter includes 16 counties in North Carolina and four in South Carolina.

U. H. Johnson is vice president of Rogers Air Conditioning Corp., and R. J. Overton is secretary-treasurer.

## December Orders Set '48 Mark at Fedders-Quigan

BUFFALO — December billings greater than for any other month in 1948, for 1/2 and 3/4-hp. window type air conditioners have been reported by E. A. Bonneville, sales manager of unit air conditioning division, Fedders-Quigan Corp. here.

This increase reflects results of the company's snowballing campaign for post season sales intended to "take the hokum out of seasonal selling."

To demonstrate that the selling of air conditioners is not a seasonal business, Bonneville cited the case of Fedders' new distributor, the L & P Electric Co. of Brooklyn. This firm, in the 90 days ending Dec. 3, 1948, signed orders from 62 dealers of whom only two had previously purchased merchandise from him.

Bonneville said Fedders has planned production to meet an anticipated threefold increase in business over 1948.

## Las Vegas Keglers Keep At It All Year 'Round—Thanks to Cool Alleys

LAS VEGAS, Nev.—While the majority of bowling alleys in the North and East close in the hot summer months, kegling is continuous throughout the summer at Vegas Lanes here—thanks to air conditioning.

Temperatures are kept at a comfortable 65° even though official temperatures of 110° are common throughout June, July, and August in this desert resort.

The job is done with water coolers and four Essex Machinery Co. fans, operated by Westinghouse motors, installed by the Nevada Electric Co. The blowers have a total capacity of 40,000 c.f.m. The alleys operate 12 lanes.

Richard Monteverde, manager, estimates that gross revenue of the lanes would be cut almost a third without air conditioning.

## Employees Installed It

## Special Reach-In Stores Whole Blood for Use by Carrier Employees In Emergency

SYRACUSE, N. Y.—Employees of Carrier Corp. recently installed a blood bank refrigerator of their own design and making at St. Joseph's hospital here. Material for the unit was contributed by the company but the employees did the work on their own time.

Now there is for the first time in Syracuse a place for storage of large amounts of whole blood. Carrier employees and their families benefit from the container and it adds to general community facilities.

The refrigerator, which has a 15-cu. ft. capacity, will hold between 100 and 150 pints of blood at a time. It maintains a thermostatically controlled temperature of 40° F.

The container was made from a Carrier unit designed for keeping food at 0° F. It was redesigned and tested by company employees on their own time.

Installation of the unit was the idea of Douglas Toffman, blood bank founder of the Carrier Corp. Carrying through with him on the project were Richard S. Lewis and Edgar Campbell.

Hoffman started a bank for Carrier employees several years ago so that

emergency needs for blood could be filled speedily. Now blood contributed by a regular system is always on hand at St. Joseph's hospital for Carrier people. The blood may be used at any Syracuse hospital. In cases of dire need the Carrier blood is used for others outside the employees' group.

Whenever blood remains unused in the bank for 21 days the blood is converted into plasma. Cases of shock and burns then receive the plasma which can be stored for a long time.

## Kohlman Elected President

## Of RSES Chapter In Milwaukee

MILWAUKEE—Walter Kohlman has been elected president of the Milwaukee chapter of the Refrigeration Service Engineers Society, it was announced here recently.

Other officers elected were R. W. Stewart, first vice president; Lee A. Miles, second vice president; Fred E. McCarver, secretary; Roman S. Bag-niewski, treasurer; and Fred M. Koehler, sergeant-at-arms.

The chapter will sponsor the Wisconsin state convention of refrigeration service engineers at the Wisconsin hotel here April 23 and 24. Parts exhibits and educational talks and papers by nationally known engineers will be features of the convention.



For More Profits in  
**Air Conditioning**  
Tie up with  
**TYPHOON**  
Sizes up to 7-tons  
Product of over 30 years of experience  
**TYPHOON AIR CONDITIONING CO., INC.**  
Division of Ice Air Conditioning Co., Inc.  
794 UNION STREET • BROOKLYN, N. Y.

## Nicholson Is Pacific Agent In 5 States

CLEVELAND—Appointment of M. S. Nicholson, of Houston, as its representative for Texas, Louisiana, Arkansas, Oklahoma, and Mississippi has been announced by Pacific Mfg. Co. here.

Nicholson, who will appoint wholesale distributors throughout the five-state area, sold air conditioning equipment for Frigidaire for seven years. At one time, he was sales manager for one of Frigidaire's largest distributors. He has a degree in business administration.

H. C. Troth, of Pacific, said appointment of manufacturers' agents is a part of the company's new plan of merchandising through wholesale distributors.

## '48 Is Big Year for National Warm Air Group's Manuals

CLEVELAND—Manuals and work sheets prepared by the National Warm Air Heating and Air Conditioning Association received a wider distribution during 1948 than in any other year in the association's history, association officials reported recently.

They added that all revisory work in bringing the manuals up to date in keeping with the latest research findings in the industry was completed during the year.

The association puts out a total of nine manuals and seven work sheets.



**SPECIALIZE IN PROFITS with Ranco CONTROLS**

Build customer confidence and eliminate time consuming and costly call-backs—insure greater profits on every replacement job with Ranco Controls specifically designed for water cooler applications. Ranco's leadership—over a score of "firsts" in design development during the past 20 years—is your assurance of better service through longer service life and trouble-free operation. It will pay you to check with Ranco first.

**SILVER—SOLDERED**

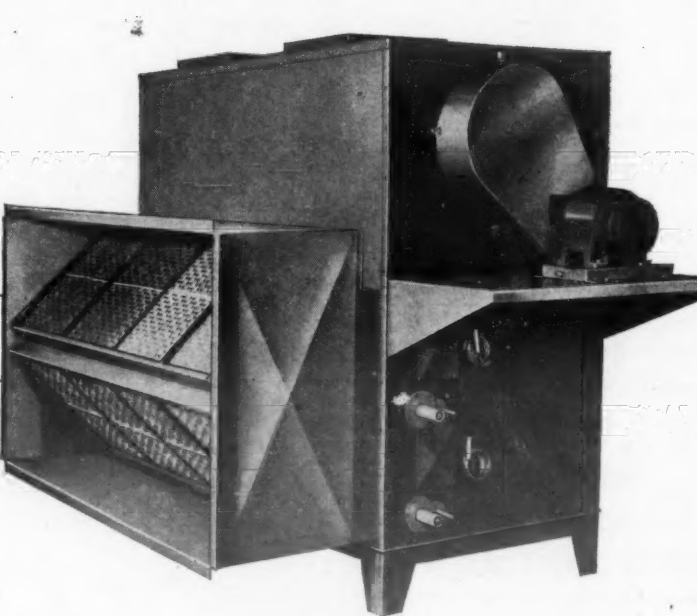
Each joint in Ranco's new beryllium copper power element, another exclusive Ranco "first," is silver-soldered to insure leak-proof operating perfection—still another reason for Ranco's dependable accuracy.

**THE BERYLLIUM COPPER POWER ELEMENT**  
Used In All Ranco Controls



**Ranco Inc.**  
COLUMBUS 1, OHIO

World's Largest Manufacturers of REFRIGERATION CONTROLS



**It delivers January in June**

**...and June in January!**

Whether Nature makes the air too hot and damp, or too cold and dry... Marlo will make it just right for you. These Air Conditioning Units completely process your air: (1) Filter it; (2) Cool and dehumidify it; (3) Heat and humidify it; (4) Circulate it. They're designed to be useful every day in the year... and quality-built in every detail to stand up under day-in, day-out service.

- For use with any refrigerant or heating medium
- Suspended (C Unit) or Floor (F Unit) types
- Complete range of sizes for all industrial and commercial applications. Send for our new Bulletin 409 for complete details and selection data

**Marlo** AIR CONDITIONING UNITS

**MARLO COIL CO. / ST. LOUIS 10, MO.**



Patented  
No. 2,442,719

Zero Plates as cold as  
**6 degrees below**  
**ZERO**

With air at BLIZZARD Speed, Cools Beverages faster than any other cooler. Yet a control keeps the beverages at the exact desired temperature.

34 case complete with  
1/2 compressor unit  
**List \$736.60**

**Dealers Wanted**

Manufactured by

**ZERO-PLATE CO.**  
1400 S. HASKELL AVE.  
DALLAS, TEXAS

**JOE BOOTH CO.**  
901 COLLARD ST.  
FORT WORTH, TEXAS



**POSITIVELY  
WILL NOT CLOG**



**"Cross-Flo" DRIER-FILTERS**

Eliminate pressure-drop troubles with Cross-Flo Drier Filters' exclusive new principle of flowing the refrigerant uniformly and slowly across a thin, cylindrical drying-agent bed instead of forcing it thru a long powder-clogged bed. Capacities: Liquid Line— $\frac{1}{4}$  to  $\frac{1}{2}$  HP; Low-side— $\frac{1}{4}$  to 15 tons (Freon 12); Suction Line— $\frac{1}{4}$  to  $\frac{1}{2}$  HP.

**REMCO** INCORPORATED  
ZELIENOPLE, PA.

**Kelvinator**

MADE BY  
EBCO MANUFACTURING CO.  
COLUMBUS, OHIO  
U.S.A.

*Cooling Cure for  
Thirsty Throats*

Sell the name that sells itself... with Kelvinator-refrigerated Electric Water Coolers. Sizes and models for every requirement. Write.

**The EBCO Mfg. Co.**  
TOWN and LUCAS STS.  
Columbus 8, Ohio

Available from  
1/2 to 10 H.P.

**CLEANABLE  
DOUBLE-TUBE  
COUNTER-FLOW  
WATER-COOLED  
CONDENSERS**

Write for literature

**Halstead & Mitchell**  
BESSEMER BLDG.  
PITTSBURGH 22, PA.



## Mexican Market for Refrigeration Equipment Evaluated; Distribution of Sales Outlined

By Eugene Hesz, International Market Analyst

We have tried to show in our first article on Mexico that our southern neighbor is full of young energy and has at present a good leadership. At the same time, it was emphasized that the country is not one economically integrated unit.

The modern centers of commerce and industry are surging ahead, building up industry and means of distribution comparable to those of the United States, but, of course, on a smaller scale.

In order to obtain a clear and quick picture of what the business possibilities in Mexico are we may refer to the automobile population, a very good indicator for commercial potentialities.

The entire country of Mexico had

at the time of the outbreak of the last war and has at present the automobile population shown in Table 1.

Where are the main concentrations of business? Mexico City is the center of trade, and again using the automobile as a lead, we find that the Federal District, which contains the capital, possesses over one third of all mechanical transportation.

The other main commercial centers of Mexico are the cities of Monterrey, Nuevo Leon, over 5% of all automobiles; Chihuahua and Ciudad Juarez, Chihuahua, nearly 6%; Guadalajara, Jalisco, nearly 5%; Leon, Guanajuato, over 2%; Mazatlan, Sinaloa, over 1%; Merida, Yucatan, 1½%; Puebla, Puebla nearly 4%;

Table 1—Automobiles In Mexico

Year	Passenger Cars	Trucks	Buses	Total
1940	80,000	19,020	6,450	105,470
1947	126,000	77,500	11,500	215,000
1948 (January)	138,150	85,000	15,000	238,150

Table 2—Mexican Imports of Electric Refrigerators In Dollars

Country of Origin	1938	1939	1940
U.S.A.	150,000	440,000	720,000
Germany	under 1,000	1,000	.....
Sweden	.....	.....	14,000
<b>Total</b>	<b>151,000</b>	<b>441,000</b>	<b>734,000</b>
	1941	1942	1943
U.S.A.	1,440,000	400,000	588,000
Other countries	.....	nominal	nominal
<b>Total</b>	<b>1,440,000</b>	<b>400,000</b>	<b>588,000</b>

Table 3

### Principal Users for Commercial Refrigerators and Equipment Up to 1 Ton, and Parts Thereof

	Percentage of Sales
Meat markets	20.0
Grocery stores	16.0
Restaurants and hotels	14.0
Ice cream, etc.	11.0
Hospitals	10.0
Beverage cooling	14.0
Milk cooling & dairy products	5.0
Industrial	3.0
Water cooling	3.0
Clubs	2.5
Ice making	1.5
<b>Total</b>	<b>100.0%</b>

### Refrigeration Equipment over 1 Ton, and Parts Thereof

Industrial	22.0
Brewing industry	20.0
Cold storage, dairy products	20.0
Cold storage, fruits and vegetables	13.0
Cold storage, fish	10.0
Bottling plants, water cooling	8.0
Cold storage meat and slaughterhouse	7.0
<b>Total</b>	<b>100.0%</b>

### Air Conditioning Equipment, Self-Contained Units, and Parts Thereof

Meat markets, dairies, restaurants, hotels, food storage	22.0
Beverage cooling, soda fountains, florist cabinets, etc.	33.0
Theaters, etc.	15.0
Transportation	5.0
Industries	25.0
<b>Total</b>	<b>100.0%</b>

had recognized the seriousness of this trend in 1947 and had restricted imports. The general intention of the government has been and is to allow parts for assembly and for replacement to enter the country.

This is a clear encouragement for the construction of assembly plants within the country, thus employing Mexican labor and partly Mexican resources.

These government measures alone would not be enough to repair the formerly excellent markets for the American product. The key to a definite improvement of the foreign exchange situation is the petroleum industry and American travelers' expenditures.

The Mexican government has done everything in its power to encourage American oil companies to continue the petroleum development of the country which was more or less interrupted since the expropriations in 1938.

These endeavors by the Mexican government and several of our larger oil companies appear to be crowned with success.

The ultimate effect upon the permanent improvement of the Mexican foreign exchange situation will depend upon the behavior of the rather radical petroleum industry labor union, which, so far, has been kept under control.

If the United States government continues its firm policy towards extreme leftist elements in this country, then the partly communistic leadership of some of Mexico's labor unions will continue to be condemned to its present impotence.

We may then look out for a bright economic future in our southern neighbor.

Table 4

### United States Exports of Commercial Refrigeration and Air Conditioning Equipment and Machinery to Mexico, 1938-45

Year	Commercial Refrigeration Units, Equipment & Parts	Ice Making Equipment & Parts	Air Conditioning Units, Equipment & Parts
1938	\$ 189,472	\$ 25,704	\$ 21,956
1939	183,710	39,283	65,148
1940	249,765	67,736	120,292
1941	777,743	64,976	93,083
1942	267,120	9,133	53,572
1943	217,836	43,512	25,078
1944	565,326	165,225	49,356
1945	1,298,788	371,200	196,893



PLATE STAND



FOOD LOCKERS



PRODUCE



HANGER BANK



**KOLD-HOLD**  
builds better plates  
for every application



LINER



MEATS



MEATS



TRUCK PLATES



CONVERSION UNIT



PROCESSING TRANSPORTATION



STORAGE

**KOLD-HOLD**  
protects every step of the way

Jobbers in Principal Cities

**KOLD-HOLD MANUFACTURING COMPANY - 500 E. HAZEL ST., LANSING 4, MICHIGAN**

There are two big reasons why you can count on the performance of Kold-Hold Hold-Over and evaporator plates to every refrigerating installation.

FIRST: They are designed and engineered primarily to refrigerate efficiently and economically.

SECOND: They are built with care and to quality standards which assures that each and every Kold-Hold plate does its designed job to the fullest degree of satisfaction. Before any plate leaves the factory it is pressure tested under water and completely dehydrated.

This combination of engineered design and controlled construction is your best guarantee of peak performance.

Would you like to know more about how Kold-Hold plates can be used for quick freezing, chilling and holding, short period cooling, or for "Hold-Over" truck refrigeration? Complete descriptive literature is yours free — write today!



## Rogers Corp. Will Cover Southern Area for Airtemp

CHARLOTTE, N. C.—With Curt L. Rogers as president, Rogers Air Conditioning Corp. has opened for business at 831 N. Tryon. The new firm is dealer and distributor of Chrysler Airtemp products for air conditioning, heating, and refrigeration.

Rogers said the company will feature sales, service, engineering, and installation, with associate dealers to be named in the principal towns throughout the firm's sales territory.

The latter includes 16 counties in North Carolina and four in South Carolina.

U. H. Johnson is vice president of Rogers Air Conditioning Corp., and R. J. Overton is secretary-treasurer.

## December Orders Set '48 Mark at Fedders-Quigan

BUFFALO — December billings greater than for any other month in 1948, for 1/2 and 3/4-hp. window type air conditioners have been reported by E. A. Bonneville, sales manager of unit air conditioning division, Fedders-Quigan Corp. here.

This increase reflects results of the company's snowballing campaign for post season sales intended to "take the hokum out of seasonal selling."

To demonstrate that the selling of air conditioners is not a seasonal business, Bonneville cited the case of Fedders' new distributor, the L & P Electric Co. of Brooklyn. This firm, in the 90 days ending Dec. 3, 1948, signed orders from 62 dealers of whom only two had previously purchased merchandise from him.

Bonneville said Fedders has planned production to meet an anticipated threefold increase in business over 1948.

## Las Vegas Keglers Keep At It All Year 'Round—Thanks to Cool Alleys

LAS VEGAS, Nev.—While the majority of bowling alleys in the North and East close in the hot summer months, kegling is continuous throughout the summer at Vegas Lanes here—thanks to air conditioning.

Temperatures are kept at a comfortable 65° even though official temperatures of 110° are common throughout June, July, and August in this desert resort.

The job is done with water coolers and four Essex Machinery Co. fans, operated by Westinghouse motors, installed by the Nevada Electric Co. The blowers have a total capacity of 40,000 c.f.m. The alleys operate 12 lanes.

Richard Monteverde, manager, estimates that gross revenue of the lanes would be cut almost a third without air conditioning.

## Employees Installed It

## Special Reach-In Stores Whole Blood for Use by Carrier Employees In Emergency

SYRACUSE, N. Y.—Employees of Carrier Corp. recently installed a blood bank refrigerator of their own design and making at St. Joseph's hospital here. Material for the unit was contributed by the company but the employees did the work on their own time.

Now there is for the first time in Syracuse a place for storage of large amounts of whole blood. Carrier employees and their families benefit from the container and it adds to general community facilities.

The refrigerator, which has a 15-cu. ft. capacity, will hold between 100 and 150 pints of blood at a time. It maintains a thermostatically controlled temperature of 40° F.

The container was made from a Carrier unit designed for keeping food at 0° F. It was redesigned and tested by company employees on their own time.

Installation of the unit was the idea of Douglas Toffman, blood bank founder of the Carrier Corp. Carrying through with him on the project were Richard S. Lewis and Edgar Campbell.

Hoffman started a bank for Carrier employees several years ago so that

emergency needs for blood could be filled speedily. Now blood contributed by a regular system is always on hand at St. Joseph's hospital for Carrier people. The blood may be used at any Syracuse hospital. In cases of dire need the Carrier blood is used for others outside the employees' group.

Whenever blood remains unused in the bank for 21 days the blood is converted into plasma. Cases of shock and burns then receive the plasma which can be stored for a long time.

## Kohlman Elected President Of RSES Chapter In Milwaukee

MILWAUKEE — Walter Kohlman has been elected president of the Milwaukee chapter of the Refrigeration Service Engineers Society, it was announced here recently.

Other officers elected were R. W. Stewart, first vice president; Lee A. Miles, second vice president; Fred E. McCarver, secretary; Roman S. Bag-niewski, treasurer; and Fred M. Koehler, sergeant-at-arms.

The chapter will sponsor the Wisconsin state convention of refrigeration service engineers at the Wisconsin hotel here April 23 and 24. Parts exhibits and educational talks and papers by nationally known engineers will be features of the convention.

**TYPHOON**

**SELF-CONTAINED**

**AIR CONDITIONING**

For More Profits in  
**Air Conditioning**  
Tie up with  
**TYPHOON**  
Sizes up to 7-tons

Product of over 30 years of experience

**TYPHOON AIR CONDITIONING CO., INC.**  
Division of Ice Air Conditioning Co., Inc.  
794 UNION STREET • BROOKLYN, N. Y.

## Nicholson Is Pacific Agent In 5 States

CLEVELAND—Appointment of M. S. Nicholson, of Houston, as its representative for Texas, Louisiana, Arkansas, Oklahoma, and Mississippi has been announced by Pacific Mfg. Co. here.

Nicholson, who will appoint wholesale distributors throughout the five-state area, sold air conditioning equipment for Frigidaire for seven years. At one time, he was sales manager for one of Frigidaire's largest distributors. He has a degree in business administration.

H. C. Troth, of Pacific, said appointment of manufacturers' agents is a part of the company's new plan of merchandising through wholesale distributors.

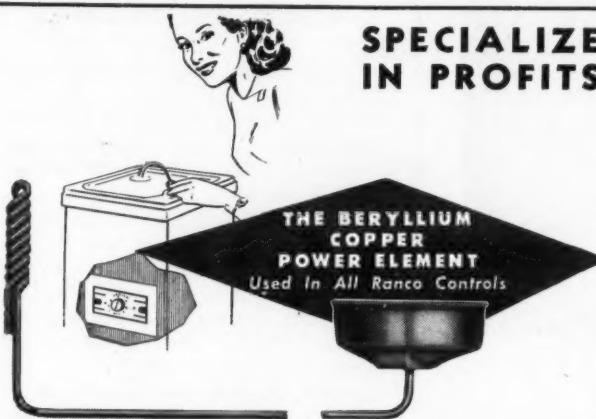
## '48 Is Big Year for National Warm Air Group's Manuals

CLEVELAND—Manuals and work sheets prepared by the National Warm Air Heating and Air Conditioning Association received a wider distribution during 1948 than in any other year in the association's history, association officials reported recently.

They added that all revisory work in bringing the manuals up to date in keeping with the latest research findings in the industry was completed during the year.

The association puts out a total of nine manuals and seven work sheets.

## SPECIALIZE IN PROFITS with Ranco CONTROLS



**Ranco Inc.**  
COLUMBUS 1, OHIO

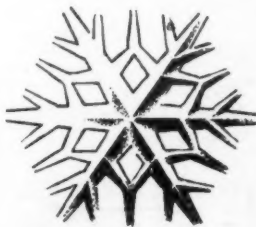


World's Largest Manufacturers of REFRIGERATION CONTROLS

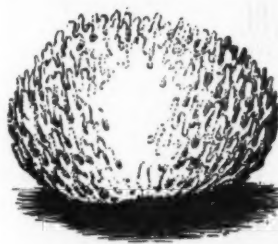
Build customer confidence and eliminate time consuming and costly call-backs—insure greater profits on every replacement job with Ranco Controls specifically designed for water cooler applications. Ranco's leadership—over a score of "firsts" in design development during the past 20 years—is your assurance of better service through longer service life and trouble-free operation. It will pay you to check with Ranco first.

### SILVER—SOLDERED

Each joint in Ranco's new beryllium copper power element, another exclusive Ranco "first," is silver-soldered to insure leak-proof operating perfection—still another reason for Ranco's dependable accuracy.



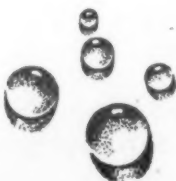
COOLS



DEHUMIDIFIES

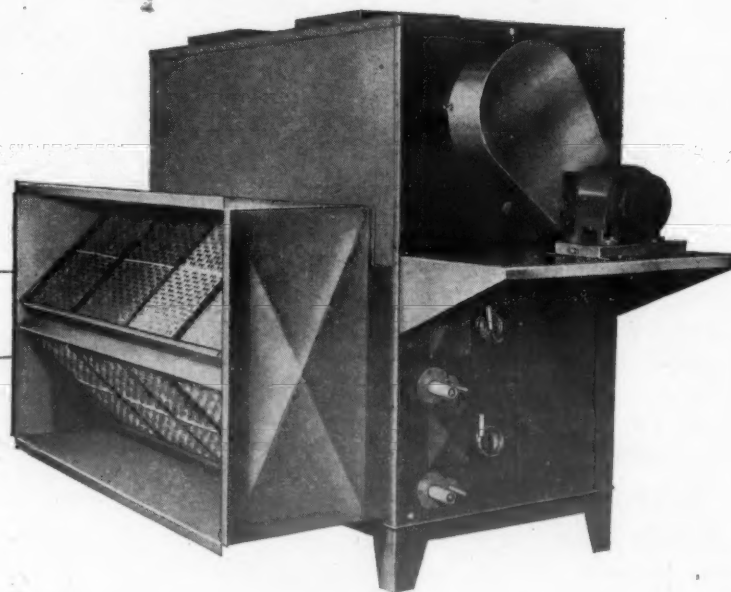


HEATS



HUMIDIFIES

It delivers January in June



...and June in January!

Whether Nature makes the air too hot and damp, or too cold and dry...Marlo will make it just right for you. These Air Conditioning Units completely process your air: (1) Filter it; (2) Cool and dehumidify it; (3) Heat and humidify it; (4) Circulate it. They're designed to be useful every day in the year...and quality-built in every detail to stand up under day-in, day-out service.

- For use with any refrigerant or heating medium
- Suspended (C Unit) or Floor (F Unit) types
- Complete range of sizes for all industrial and commercial applications. Send for our new Bulletin 409 for complete details and selection data

**Marlo** AIR CONDITIONING UNITS

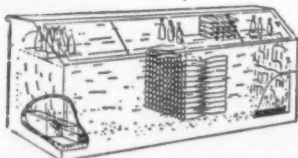
**MARLO COIL CO. / ST. LOUIS 10, MO.**



Zero Plates as cold as  
6 degrees below

**ZERO**

With air at BLIZZARD Speed, Cools Beverages faster than any other cooler. Yet a control keeps the beverages at the exact desired temperature.



34 case complete with  
1/2 compressor unit

List \$736.60

Dealers Wanted

Manufactured by

**ZERO-PLATE CO.**  
1400 S. HASKELL AVE.  
DALLAS, TEXAS

**JOE BOOTH CO.**  
901 COLLARD ST.  
FORT WORTH, TEXAS



## LOCKRATOR offers

- A complete new line of LOCKRATOR 1949 refrigerators—two new deluxe freezer-refrigerator combinations in 9 and 13 cu. ft. A new 8 ft. standard deluxe-volume seller. A low priced 4 ft. apartment model. Two models of the famous LOCKRATOR freezers in a 4 and 13.5 cu. ft. Sold only under LOCKRATOR trademark through legitimate dealers and distributors. Write for details —some territory still open.

Model 4E—4 cu. ft. Apartment size Refrigerator

Model 8E—8 cu. ft. Standard Deluxe Refrigerator

Model 9E—9 cu. ft. Deluxe Refrigerator-Freezer Combination

Model 13E—13 cu. ft. Deluxe Refrigerator-Freezer combination

Model 4D—4 cu. ft. Kitchen Freezer

Model 13.5D—13½ cu. ft. Farm and Home Upright Freezer

Model 41C—21 tray, 42# ½ or ⅓ H.P. ice cube maker



**Stoddard Manufacturing Co.**  
MASON CITY, IOWA

## What's New



### Midge-Valve Claimed To Check Suction Leaks

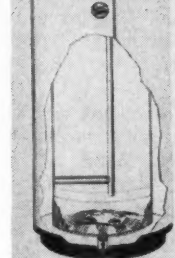
NEW YORK CITY—Midge-Valve, a universal, all position check valve that checks suction leaks in commercial and domestic refrigerators, is being distributed by Hydrovalve Co., 262 West 38th St., here.

The Midge-Valve is claimed to solve the problems of defrosted evaporators, large electric bills, noisy and laboring starts, and short cycling. The product is installed on rebuilt hermetic jobs to check leaks even before they occur.

Midge-Valve is precision constructed with flared ends for speedier on the job installation. It has stainless steel spring and disc, soft electrolytic copper gasket, and diamond finished seat.

### 'Water Hotter' Minimizes Mixing of Cold Stream

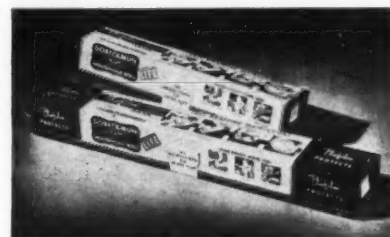
MIDDLEVILLE, Mich.—A new development, called the Water Hotter, was announced recently by the White Products Corp., manufacturer of electric water heaters.



In use, the Water Hotter is described by G. E. White, president, as diffusing and turning back the cold water intake at the base of the heater, thus preventing too much mixing with the hot water column in the tank, and giving 6.9% more hot water withdrawal than utility requirements.

"This is accomplished by a convex baffle with four eye-shaped ports," said White. "The cold water intake spreads fan-wise from under the convex baffle and through the ports, so that the hot water column is not penetrated by the cold water intake."

### Household Pliofilm Roll Suitable for Freezer Use



CLEVELAND—Pliofilm for household use, packed in a cutter box with a serrated knife edge, is now being distributed by the Dobeckmun Co., 3301 Monroe Ave. here.

The new product is being made in rolls of two sizes, according to the company. One is a roll 12 in. wide and 35 ft. long. The other is an 18-in. roll, 65 ft. in length.

Heretofore restricted to commercial or manufacturing use, the Good-year product has many possibilities in the home, company officials said. They pointed out that while being transparent, pliable, and light in weight, Pliofilm is tough, tear resistant, and completely moisture-proof.

It retains food crispness and flavor whether at room temperature or under refrigerated or frozen conditions, they noted. It can be washed for re-use without losing any of its properties, they claimed.

### Hook-'N-Haul Truck Loads Open or Closed Cases



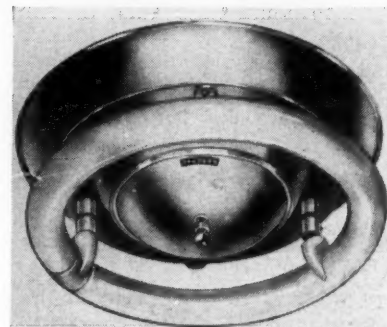
MILWAUKEE—Teichmann Industries, 714 W. Wisconsin Ave. here, has recently introduced a new "Hook-'N-Haul" truck for moving tote boxes, cases, and boxes. A double hook feature is said to enable the hook arm to bite into totally closed or open wood boxes and cases

or hook into the handles on metal tote boxes.

After the load has been hooked, the operator pulls backward on the handle and the load slides onto the balanced tilting carrier plate.

To unload, a slight push with the hook arm overbalances the carrier plate and allows the load to slide gently to the floor. One swivel and two stationary casters turn the truck in its own axis.

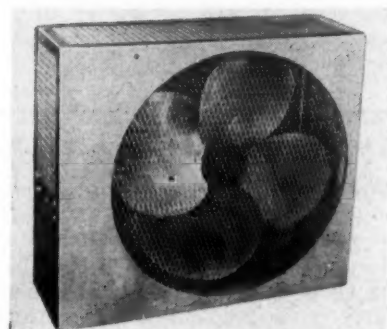
### Circular Fluorescent Light Introduced by Prevore



BROOKLYN—A new fluorescent fixture containing a 32-watt G-E circular bulb that gives light equivalent to a 100-watt incandescent lamp has been announced by the Prevore Electric Mfg. Corp. here.

Called the Prevore circine fluorescent fixture, it is available in several finishes, including white enamel, polished aluminum, chromium on steel, and hand etched aluminum. Suggested retail price is \$9.95.

### Koolmaster Window Fan Has 4,700 CFM Capacity



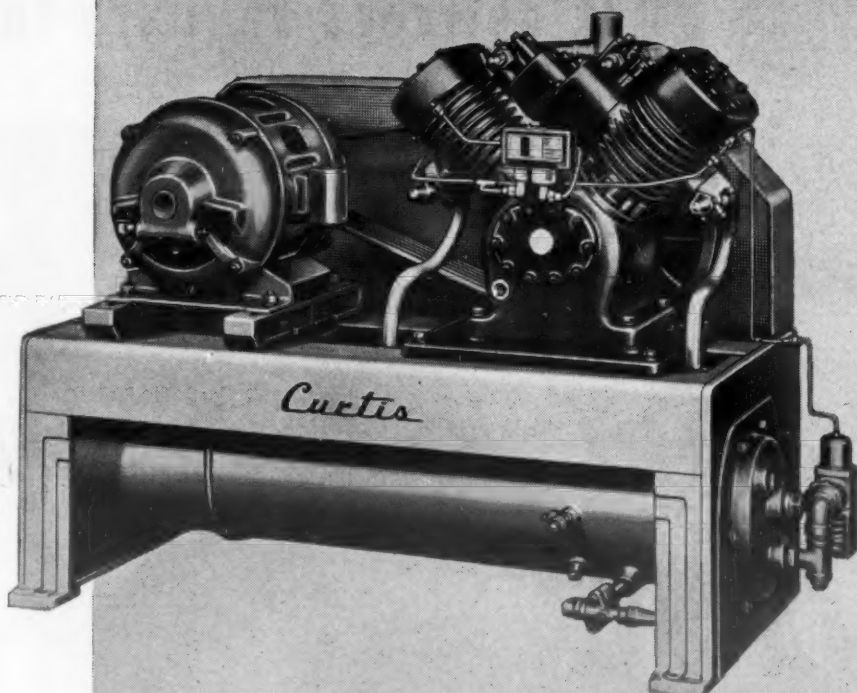
CHICAGO—A new 24-in. window fan, designed for homes, restaurants, stores, and other public buildings, has been introduced by the Air Equipment Co., 1713 W. Carrol Ave. here. The new fan will be known as the Koolmaster, according to George Kalwitz, Air Equipment vice president and sales manager.

It is a compact unit, despite its high capacity of 4,700 c.f.m., and measures only 10½ in. wide, 25¼ in. high, and 28¼ in. long.

It is belt driven and is operated by a ½-hp. 110-volt, 60-cycle single phase two speed standard G-E motor, the maximum speed being 650 r.p.m.

# Curtis

## CONDENSING UNITS

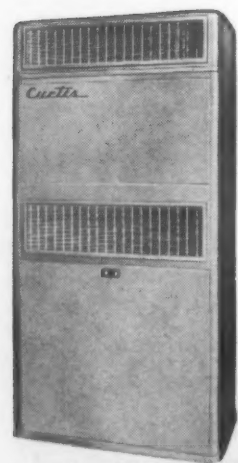


### A Sound Foundation For DEPENDABLE, EFFICIENT REFRIGERATION

The foundation for any successful refrigeration installation is the condensing unit... a vital reason why you should standardize on CURTIS. Curtis provides such time-tested engineering advantages as:

- Timken Bearings
- Self oiling... Positive lubrication
- Extra large condensers
- Slow operating speeds
- Quiet operation
- Precision construction throughout

It all adds up to a longer life of economical, trouble-free, low-cost performance. Write to CURTIS for complete information.



Curtis Packaged Air Conditioning Units — 3 to 15 H. P.

# Curtis

REFRIGERATING MACHINE DIVISION

of Curtis Manufacturing Company

1912 Kienlen Avenue

St. Louis 20, Missouri

95 Years of Precision Manufacturing

## WATER FILTERS

remove CHLORINE TASTE

remove RUST AND DIRT

SELL A FILTRINE FILTER WITH EVERY COOLER

A Few Choice Areas Open for Factory Representatives

**FILTRINE MANUFACTURING CO., BROOKLYN 5, NEW YORK**

"Water Coolers and Filters for 40 Years"

## RECO

TWO TEMPERATURE FREEZE COOLERS

Streamlined, Gleaming Aluminum Finish

Combines Generous Freezer & Cooler Space in One Economical Fixture.

Available in Wide Range of Sizes.

Illustrated Model 80-3TT (REFRIGERATION ENGINEERING CORPORATION)

RECO PRODUCTS DIVISION  
2020 NAUDAIN STREET, PHILA. 46, PA.



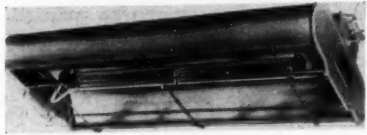
## What's New (Con't)

### 2 New Sterilaire Models Designed for Walk-Ins

LOS ANGELES—Two new models of Sterilaire, the ultraviolet germicidal lamp for walk-in boxes, have recently been announced by Ultra-Violet Products, Inc. here.

T. S. Warren, president of the company, claimed that the new lamp has many features that make it operate efficiently in temperatures of 30 to 40°. He further claimed that Sterilaire effectively kills mold and slime-causing bacteria and thereby reduces meat trim losses.

Users have reported that in the case of refrigeration breakdown, the



Sterilaire RG18

lamp affords complete meat protection against spoilage, he said.

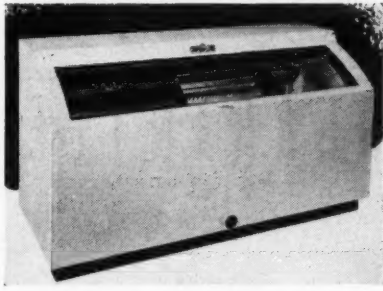
This new model has a streamlined housing with spectral aluminum inside reflector. Spun glass and neoprene insulation protect the reflector and warm air pocket around the tube from low temperatures.

It is claimed that patented automatic tube temperature control and secondary tube reflector enable the new Sterilaire to operate at 80% to 90% of efficiency in refrigeration temperatures, whereas ordinary ultraviolet lamps quickly drop to 20% of efficiency.

Transformer meets utility company and underwriter requirements, according to the manufacturer. Unit may be plugged into ordinary electrical outlets or wired with conduit.

Current consumption ranges from 40 to 65 watts, according to the size unit installed. Accessory baffles are available for use in cases where the lamp must be installed directly in the air stream. These baffles protect the warm air pocket around the tube and materially increase its efficiency. Tube is further protected against breakage by a snap-on type guard.

The lamps, RG18 and RG36, are available through wholesale supply houses and refrigeration dealers.



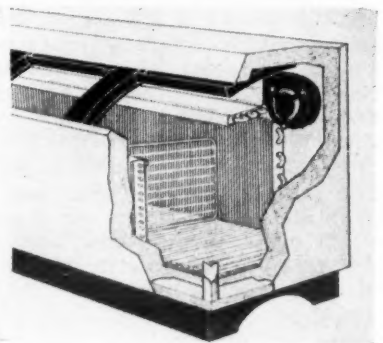
Exterior of Nolin dry beverage cooler.

### 'Freez-O-Rific' Cooling In Nolin Beverage Case

MONTGOMERY, Ala.—Introduction of its new 1949 all-purpose dry beverage cooler, featuring a "Freez-O-Rific" cooling system, has been announced by Nolin Mfg. Co. here.

The cooling system is composed of three heavy-duty, fin-type coils plus a Freez-O-Rific circulator which may be shut on or off as needed, according to Nolin.

Available in 4-ft., 6-ft., 8-ft., and



Interior of Nolin beverage cooler.

10-ft. lengths, the cooler is being manufactured in either remote or self-contained models. The self-contained model is 2 ft. longer over-all and provides a working space above the compressor compartment.

The cooler is constructed of aluminum which has received a protective coating of Alodine and has a baked enamel finish in a wide range of colors. Streamlined vanishing-type doors are available in either black hard rubber or stainless steel.

### Teen-Agers Go for 'Sno-Breze Junior'

The "Sno-Breze Junior" shown at the right is designed to fit average casement windowpane opening for bedrooms, trailers, and other small rooms.



PHOENIX, Ariz.—A junior size evaporative cooler for cooling a bedroom, trailer, or small, remote room has been introduced by the Palmer Mfg. Corp. here.

Called "Sno-Breze Junior" the unit measures 12-in. high, 16-in. wide, and 9½-in. deep. It is said to be able to fit in the average size casement window opening by removing one pane of glass.

The unit weighs 17 lbs. and disperses 800-cu. ft. of filtered, washed, and cooled air per minute.

A quiet, heavy duty, rubber mounted motor drives a deep pitch four blade fan which expels the cooled air through a 10-in. grille covered opening. The unit employs a "rain drop" water distribution system to filter, wash, and cool the air.

Sno-Breze Junior sells for \$29.75.

### Dicelcer Combination Units Feature H & M Condensers

BERWICK, Pa.—A new line of combination air and water-cooled condensing units with Halstead & Mitchell cleanable counterflow condensers mounted under the base of the regular Dicelcer heavy duty air cooled unit, has been announced here by the General Machine and Mfg. Co.

The new combination Dicelcer units

are available in ⅓, ½, ¾, 1, and 1½-hp. sizes, according to the company.

All combination units are shipped complete with automatic water valve and dual pressure control, the company explained.

"Actual B.t.u. capacities are governed by the head pressure under which you wish to operate," the company asserted. "Water flows only when the air-cooled condenser is overloaded and stops automatically as soon as normal operating pressure returns."

### WARREN sells meats!



Model WT illustrated  
Exceptionally wide (33½") one-shelf display—full view of contents. Slimline fluorescent lights. Available in regular and continuous standard-length cases.

Full-view display . . . that's what is built into Warren Model WT.

Customers buy from a refrigerator that shows fresh meat at its best. Temperature-sealed Model WT is the outstanding unit of its kind being used by thousands of dealers in perishable meats throughout the country.

The Warren franchise offers profitable opportunities on this and many other types of modern refrigerators for meat markets and food stores. Write Dept. 501 for illustrated literature and complete information.



The WARREN COMPANY  
INCORPORATED

905 MEMORIAL DRIVE, S. E. ATLANTA 1, GEORGIA

## They Go Together...

### FOR STARTING AND PROTECTING HERMETICALLY-SEALED COMPRESSOR MOTORS

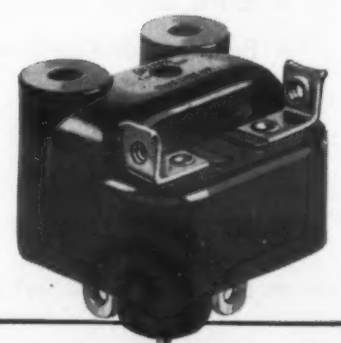
Regardless of the type of hermetically-sealed compressor you manufacture or use, you simply can't beat the combination of Klixon Protectors and Klixon Starting Relays for trouble-free refrigeration operation.

The Klixon dome-mounted Protector prevents motor burnouts. It takes into account all the factors that cause a motor to overheat and burn out, and shuts the power "off" should the motor become dangerously overheated. When it cools to safety, the protector automatically snaps "on" the power again enabling the unit to maintain refrigeration. This positive protection eliminates costly service calls, reduces replacements and factory returns.

The Klixon Motor Starting Relay starts the motor surely and quickly. Its positive action and long life eliminate starting troubles . . . make it a fitting companion for the Klixon Motor Protector.



KLIXON  
Dome Mounted  
PROTECTORS



KLIXON  
STARTING  
RELAYS

KLIXON

SPENCER THERMOSTAT COMPANY  
2301 FOREST STREET, ATTLEBORO, MASS.

**FORD**  
ASPHALT MASTIC BOARD  
The ideal vapor barrier. Keeps insulation dry. A money saving waterproof replacement for treated woods and plastics. FABRICATED to Any Shape and Size. For Breaker Strips — Cold Air Ducts  
Ford Distributing Co.  
1129 E. 45th St., Chicago 15, Illinois

**WILSON**  
REFRIGERATION, INC.  
• FARM AND HOME FREEZERS  
• REACH-IN REFRIGERATORS  
• WALK-IN REFRIGERATORS  
• FARM MILK COOLERS  
DIVISION OF WILSON CABINET CO., INC.  
SMYRNA • DELAWARE

GET GENUINE  
**WAGNER Bearings**  
Wagner Bimetal sleeve bearings resist seizure, last indefinitely when properly lubricated. They come to you diamond bored to specified size; simply press in according to instructions, and reassemble motor. They are also available unbored for undersize shafts. Get them now from your Wagner distributor. Name on request.  
Wagner Electric Corporation  
ESTABLISHED 1941  
8471 Plymouth Avenue, St. Louis 14, Mo., U.S.A.  
ELECTRICAL AND AUTOMOTIVE PRODUCTS



## Erie Licenses Inspectors Of Conditioning Systems

ERIE, Pa.—An amendment to an ordinance of 1930 adding inspectors of air conditioning systems to a list of those persons who must be licensed by the city's engineering inspection board was introduced in council recently.

The ordinance already on the books created an inspection board with three members appointed by council each for a term of three years. The board was empowered to license those persons having charge of water tender, steam boilers, and steam engines.

Refrigeration units and their appliances were added to the list, thus including persons working with air conditioning equipment.

## Sends Patron to Cooler If He Wants Steak

OMAHA, Neb.—Sam Nisi, proprietor of the Spare Time Cafe, 1211 S. 5th St., reports that his business is growing rapidly as a result of the installation of a large walk-in cooler just off the dining room where patrons are encouraged to visit the cooler and pick their own steaks.

This is the only restaurant from coast to coast where you can select your own steak, he declared. Hundreds of pounds of properly aged meat are kept in the cooler and the selected steaks are prepared on an electric cutting machine right before the patron's eyes and to his prescribed thickness.

## Beverage, Water Cooler And Ice Maker Sales Up In Chattanooga Area

CHATTANOOGA, Tenn.—Laundry equipment registered the only sales gains reported by major appliance dealers in Chattanooga for November as compared with October, a bulletin from the Electric Power Board of Chattanooga revealed recently.

On the commercial side, beverage coolers, water coolers, and ice makers showed gains while commercial refrigerators and air conditioning units fell off.

Clothes dryers were up 77% over October, ironers 158%, and clothes washers 17%. Off from October were water heaters, 5%; vacuum cleaners 2%, refrigerators 15%, ranges 19%, home freezers 37%, and dishwashers 43%. Garbage disposals held even.

The November sales report is as follows:

Appliance	Units	Average Unit Price	Total Sales Value
Refrigerators	259	\$ 284.90	\$73,789.10
Home Freezers	15	337.80	5,064.00
Ranges	317	255.72	81,063.24
Water Heaters	191	118.09	22,555.19
Ironers	31	163.20	5,059.20
Vacuum Cleaners	885	74.46	65,897.10
Clothes Washers	208	166.43	38,777.44
Clothes Dryers	16	229.62	3,673.92
Dishwashers	9	310.76	2,796.84
Garbage Disposals	4	124.95	499.80
Air Conditioning Units	3	3,058.21	9,165.64
Refrigerators (Com'l)	8	615.80	4,926.30
Freezing Cabinets	4	422.74	1,690.96
Soda Fountain	1	2,750.00	2,750.00
Beverage Coolers	51	195.86	10,039.86
Ice Makers, Water Coolers	4	130.49	\$21.96

# Contractor Solves Guarantee Problem

90-Day Free Service and 1-Year Parts Replacement Explained  
On Printed Form Which Eliminates Most Misunderstandings

## GUARANTEE

---

This certifies that \_\_\_\_\_ Compressor, Model No. \_\_\_\_\_  
Serial No. \_\_\_\_\_, has been carefully inspected on date of installation, \_\_\_\_\_  
Should any part or parts prove defective during the period of

### ONE YEAR

from above date, we hereby guarantee to replace same, FREE OF CHARGE, F.O.B. FACTORY.

### COMPLETE FREE SERVICE

shall be furnished for operation of above machine (s) for a period of 90 days from above date, during the hours only of between 8 a.m. and 5 p.m. week days and from 8 a.m. until 12 noon on Saturdays.

Should it be necessary to call for service other than above specified, buyer agrees to pay only the difference between the regular hourly scale and overtime which are figured as follows: \$2.50 per hour for regular time, time and one-half for overtime and double time for Saturday afternoons, Sundays and all holidays.

It is understood and agreed that should the account become delinquent or serviced by other than the seller, this guarantee in its entirety is cancelled.

INSTALLATION: \_\_\_\_\_

Name \_\_\_\_\_ **Refrigeration WRIGHT Service**  
Street \_\_\_\_\_ Per \_\_\_\_\_  
City \_\_\_\_\_

of the problems that many firms are still attempting to solve. (Note) The regular service charge of \$2.50 has been raised to \$3.00 since this form was printed.

SAN DIEGO, Calif.—Ninety-nine out of 100 customers are "perfectly happy" with the "90 days free service—one year guarantee on parts" policy originated in 1941 by Wright Refrigeration, Inc., here, according to R. A. Wright, president of the contracting and servicing firm.

Recent reports in AIR CONDITIONING

& REFRIGERATION NEWS on discussions of guarantees prompted Wright to review results of his policy. Explaining that the company's guarantee form (see cut) was printed in June, 1942, but that the 90-day free service was in effect a year or more earlier, Wright said.

"It (the guarantee) seems to stipulate all the things that some dealers are talking about six years later. It might be the reason why a lot of them do not stay in business over any particular period of time."

After noting that some outlets are required by the factory to give one year free service, Wright continued:

"However, most of the other boys around here go along with me on this 90-day deal and it is very seldom that we have to deviate from it."

"If we got into competition where someone made an issue of it—we would give them one year's free service rather than lose the order. I think we have had to do this just exactly five times in the past six years. We find that the customer does not even expect such silly service unless our salesmen themselves promote the idea in a customer's head."

"Furthermore, we have found that when we give a man one year's free service and something goes wrong on the thirteenth month, they just have a fit unless we go out and do the work gratis."

"They invariably claim they reported the trouble to us a month or two ago and told our man to stop around when he was in the vicinity as they did not want to put us to the extra expense of making a special trip. They were so worried about our expenses that now that they were so kind to us to let it drag."

"The machine didn't break down until the thirteenth month, but they really think in view of all of that we should do the work free of charge on the thirteenth, or maybe the fourteenth, and in some instances, the fifteenth month."

"We also had the same thing happen when we have the 90-day free service and if we want to give someone a little free service on the fourth or fifth month, he is just tickled to death."

"I admit now and then that we do some work on a job that has been in for five months without charging them, for we think that the job should have worked without any extra service. The fact that the customer only had 90 days' guarantee makes him feel an awful lot better, but he would still expect this little extra service even if we gave them

one year, two years, or five years."

The guarantee plainly states that the company will replace free of charge, f.o.b. the factory, any worn parts proven defective, Wright pointed out.

"Of course," he said, "we do not charge him (the customer) for that freight. That is just something else that we give him more than we guaranteed to do which makes him feel rather good about it."

"However, if it was not printed on this guarantee that way, he just would take it for granted and would not think we were doing him any favors at all."

"It is hard to believe how very, very few people I have found who object to this guarantee which is sent to them when the job is installed. They really think we are giving them something, which makes them very happy."

"We find where one of these guarantees has not been sent, then we have considerable trouble with collecting for Saturdays, etc., or any overtime work, or even getting paid for service after the 90-day period is up."

"On a set-up like that, the customer understands what he is getting and he doesn't think that this guarantee . . . is out of reason whatsoever."


## Wyoming Farm Bureau Seeks Strict Biologicals Control

RAWLINS, Wyo.—Strict regulation and enforcement to provide for proper refrigeration and care of vaccines, viruses, and biologicals are requested to the state legislature in a plank adopted by the Wyoming Farm Bureau federation here.

The bureau also urged strict inspection for identification or proof of ownership of meat stored in frozen food locker plants in the state.

**TOP SELLING LINE FOR '49**

DAIRY WALL CASES • FREEZERS  
• SELF SERVICE CASES • FULL  
VISION CASES • VEGETABLE CASES  
• SELF-CONTAINED  
OR REMOTE



**COLD-IN**

YOUR KEY TO  
BETTER REFRIGERATION

**COLDIN CABINET CO., INC.**  
2800 Webster Avenue, Bronx 58, N. Y.

# The First Really New EVAPORATIVE CONDENSER

by **KRAMER**

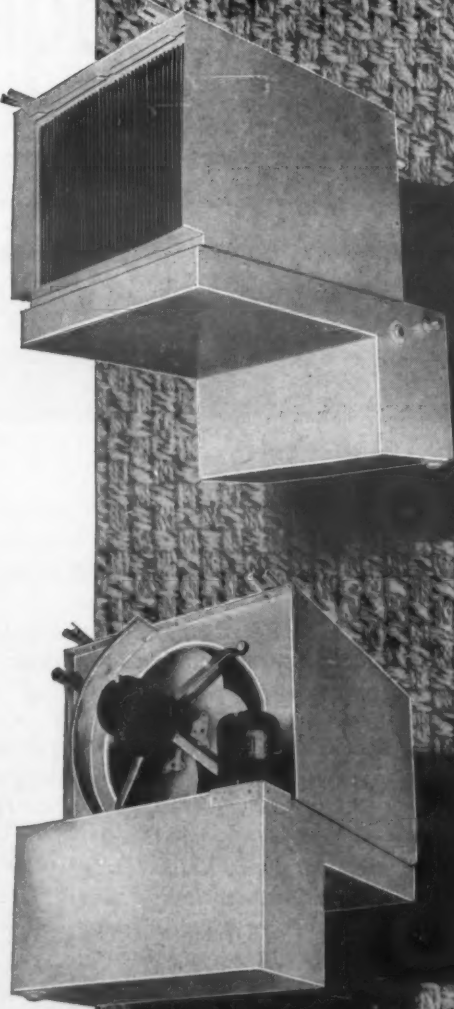
**Opens Many Opportunities  
in the Small Tonnage Field**

*Featuring . . .*

- Small Capacities—2 to 8 tons
- Single or Multi-Circuits
- Stainless Steel Sump
- Extra Large Water Delivery
- Packless & Greaseless Pump
- Bare Tube Coils
- No Nozzles
- No Belts
- Low Cost
- For Freon, Methyl and Ammonia

WRITE FOR BULLETIN R162B

**KRAMER TRENTON CO.**  
*Trenton 5, N. J.*



*Be Smart! Get the New No. 148*  
**Fall and Winter DEPENDABOOK!**

**HARRY ALTER'S  
REFRIGERATION PARTS CATALOG**

A catalog issued to and for the trade only...Write—NOW—on your letterhead, for your copy of the most nearly complete refrigeration-parts-and-supplies catalog in the business—the new DEPENDABOOK!

**The HARRY ALTER CO.**

1728 SOUTH MICHIGAN AVE  
CHICAGO 16, ILL.  
134 Lafayette St., New York 13, N. Y.

**WHOLESALE ONLY**



## 38,982 Freezers Sold In October Clarification of Rental-Purchase Terms--

Farm and home freezers complete with high and low side and cabinet, where 50% or more of the net cabinet capacity is designed for the freezing and/or storage of frozen food.

### OCTOBER (33 Companies)

Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. 4.9 cu. ft. and under...	3,639	.....	38	3,677
2. 5.0 to 6.9 cu. ft. ....	7,361	.....	48	7,409
3. 7.0 to 8.9 cu. ft. ....	13,225	.....	101	13,326
4. 9.0 to 10.9 cu. ft. ....	2,864	.....	1	2,865
5. 11.0 to 12.9 cu. ft. ....	2,688	.....	3	2,691
6. 13.0 to 16.9 cu. ft. ....	5,130	.....	3	5,133
7. 17.0 to 20.9 cu. ft. ....	3,258	.....	15	3,273
8. 21.0 to 29.9 cu. ft. ....	149	.....	.....	149
9. 30.0 to 39.9 cu. ft. ....	445	.....	.....	445
10. 40.0 to 49.9 cu. ft. ....	2	.....	.....	2
11. 50.0 to 59.9 cu. ft. ....	.....	.....	.....	.....
12. 60.0 cu. ft. and over ..	12	.....	.....	12
<b>Total</b> .....	<b>38,773</b>	.....	<b>209</b>	<b>38,982</b>

### FIRST TEN MONTHS (33-36) Companies)

Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. 4.9 cu. ft. and under ..	59,666	2	886	60,554
2. 5.0 to 6.9 cu. ft. ....	65,179	.....	809	65,988
3. 7.0 to 8.9 cu. ft. ....	103,843	.....	1,281	105,124
4. 9.0 to 10.9 cu. ft. ....	34,947	.....	115	35,062
5. 11.0 to 12.9 cu. ft. ....	63,444	4	332	63,780
6. 13.0 to 16.9 cu. ft. ....	31,498	.....	82	31,580
7. 17.0 to 20.9 cu. ft. ....	33,772	.....	28	33,800
8. 21.0 to 29.9 cu. ft. ....	2,190	.....	3	2,193
9. 30.0 to 39.9 cu. ft. ....	3,898	.....	.....	3,898
10. 40.0 to 49.9 cu. ft. ....	33	.....	.....	33
11. 50.0 to 59.9 cu. ft. ....	.....	.....	.....	.....
12. 60.0 cu. ft. and over ..	102	.....	.....	102
<b>Total</b> .....	<b>398,572</b>	<b>6</b>	<b>3,536</b>	<b>402,114</b>

Participating companies: Ace Cabinet Corp.; August G. Barkow Mfg. Co.; Beatty Mfg. Co.; Ben-Hur Mfg. Co.; R. H. Bishop Co.; Brewer-Titchener Corp.; Carrier Corp.; Chapman Refrigerator Sales Co.; The Coolerator Co.; The Crosley Div., Avco Mfg. Corp.; Deepfreeze Div., Motor Products Corp.; Frigidaire Div., General Motors Corp.; General Electric Co.; General Refrigerator Co.; Gibson Refrigerator Co.; Hotpoint, Inc.; International Harvester Co.; Master-freeze Home Locker Mfg. Co.; The Maytag Co.; Nash-Kelvinator Corp.; Norge Div., Borg-Warner Corp.; Oregon Refrigerator Co.; Portable Elevator Co.; Revco, Inc.; Sanitary Refrigerator Co.; Schaefer, Inc.; Seeger Refrigerator Co.; Emil Steinhart & Sons, Inc.; Stoddard Mfg. Co.; Sub-Zero Freezer Co., Inc.; Victor Products Corp. (In 6-1-48); Whiting Corp. (In 3-1-48); Wilson Cabinet Co., Inc.; Ideal Cooler Co. (Out 7-1-48); Midwest Industries, Inc. (Out 10-1-48); Quillen Bros. Ref. Co. (Out 7-1-48); Refrigeration Corp. of America Div., Noma Electric Corp. (Out 4-1-48).

(Concluded from Page 1, Column 2)

rental agreement which contains no obligation or option for the purchase of the article.

"However, before the expiration of the 30-day period, either there would be a sale of an article of the type delivered, or the article that was delivered would be returned to, and reconditioned by, the company for sale elsewhere. In the event of a completed sale, the lessee-purchaser could either retain the article previously delivered to him or receive a new article.

"If the former should occur, the regular retail purchase price would be reduced by \$5; but if the latter should occur, no such reduction in price would be made. The reduced purchase price or the regular purchase price, as the case may be, would be treated as the selling price subject to the down payment, maturity, and monthly payment provisions of Regulation W.

"The absence from the written rental agreement of an obligation or option to buy would not be deemed to be of controlling significance in circumstances such as these. Viewed in their entirety, the transactions in question look toward the completion of a sale and, at the outset, should comply with the regulation either as an ordinary extension of instalment credit or as a delivery in anticipation of an instalment sale under Section 6(g) of the regulation.

"In this connection it is to be noted that Amendment No. 1 to the regulation amended Section 6(g) thereof to provide that, if certain specified conditions are followed, the seller

may allow a trial period of not more than 10 days without previously obtaining the required deposit or the down payment necessary in an instalment sale. However, the company's proposed plan would have to be modified in order to qualify for the benefits of the amendment."

Dealers should especially note the last paragraph of the above interpretation. The "certain specified conditions" are described as follows:

"Except as provided in the following paragraph, in case a listed article is delivered in anticipation of an instalment sale of that article or a similar article (such as a delivery 'on approval,' 'on trial,' or as a 'demonstrator'), the registrant shall require, at or before the time of such delivery, a deposit equal to the down payment that would be required on such an instalment sale.

"In order to qualify as an exception to the preceding paragraph the article must be an article listed in group B, the delivery must be exclu-

sively for the purpose of a bona fide trial, approval or demonstration, and the registrant must, within ten days after such delivery, obtain the down payment referred to in the preceding paragraph or the return of the article.

"Every such case shall be evidenced by a written agreement signed by the respective parties, of which a copy shall be given to the prospective purchaser at or before the delivery of the article, and such written agreement shall clearly and prominently state that (1) the delivery is exclusively for the purpose of a bona fide trial, approval, or demonstration, and (2) the prospective purchaser will make the required down payment (the amount of which shall be stated in the agreement) within ten days after delivery of the article for trial, approval, or demonstration, or will return or release the article within such ten day period.

"In calculating the maximum maturity in connection with transactions under either of the two preceding paragraphs, the date of delivery of the article sold shall be considered the date of the sale."



**HEAT EXCHANGERS**

Shell and Coil type for use with FREON and Methyl-Chloride—for installations 1/2-ton to 50-tons. Acme Heat Exchangers increase the capacity of all cooling systems.

**ACME INDUSTRIES, INC.**

Jackson, Michigan

Representatives in all principal cities

## Birmingham Meeting--

(Concluded from Page 1, Column 3)

to 12:30 p.m.

1:30 p.m. RSES Educational speaking program.

6:30 p.m.—Banquet and entertainment, Tutwiler hotel.

### SUNDAY, FEB. 6

10 a.m.—Exhibits open 10 a.m. to 4 p.m.

Speakers on educational topics will consist of the following, plus one other speaker not yet announced:

"Cold Plates and Their Application," A. F. Sawyer, Dole Refrigeration Co.

"Driers and Drying Methods," Dr. W. O. Walker, director of research and development, Ansul Chemical Co.

"Construction & Repair of Refrigeration Cabinets," John H. Spence, service manager, Hussmann Refrigeration, Inc., and educational chairman, RSES International.

"Design & Application of Electric Controls," R. H. Luscombe, sales manager, Penn Electric Switch Co.

In addition to the above program a series of educational briefs composed of short talks by factory experts on various refrigeration problems, augmented by motion pictures and illustrated slide films, will be interspersed throughout the program.

Those interested in attending the conference should make reservations for rooms direct to E. V. Oakwood, housing chairman, 200 S. 20th St., Birmingham 3, Ala.

The educational conference is open to the entire refrigeration and air conditioning industry and to its allied industries. The registration fee is \$1 for necessary expenses.

The Alabama State Association of RSES and Birmingham chapter are hosts to the First Southern Refrigeration Educational Exhibit and Conference. Heading the general conference committee are Robert Gennett, general chairman, Birmingham; C. S. Tucker, RSES International director, Birmingham; and J. M. Manley, Alabama State president of RSES, Montgomery, Ala.

Chairmen of the other committees are: Housing—E. V. Oakwood, Birmingham; Entertainment—George Tribble, Birmingham; Reception—N. F. Brown, Mobile; Publicity—Floyd Corbin, Birmingham.

## List of Exhibitors at Southern Conference

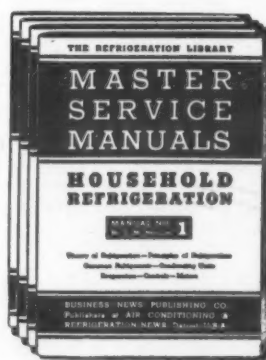
Ace Cabinet Corp.  
Acme Industries, Inc.  
Airsco Mfg. Co., Inc.  
Alco Valve Co.  
Aminco Refrigeration Products Co.  
Ansul Chemical Co.  
Automatic Products Co.  
Bundy Tubing Co.  
Bush Mfg. Co., The  
Colbar, Inc.  
Coolstream Corp.  
Copeland Refrigeration Corp.  
Curtis Refrigerating Machine Div. of Curtis Mfg. Co.  
Davison Chemical Corp.  
Dayton Rubber Co.  
Detroit Lubricator Co.  
Dole Refrigerator Co.  
Du Pont de Nemours & Co. Inc., E. I.  
Ebo Mfg. Co.  
Electric Div. of The Simoniz Co.  
Frigidaire Sales Corp.  
General Controls Co.  
Gilmer Co., L. H.  
Grand Rapids Brass Co.  
Holstead & Mitchell  
Heat-X-Changer Co., Inc.  
Henry Valve Co.  
Highside Chemicals Co.  
Imperial Brass Mfg. Co.  
Jarrow Products  
Kerolast Mfg. Co.  
Kold-Hold Mfg. Co.  
Kramer Trenton Co.  
Larkin Coils  
Lehigh Mfg. Co.  
McQuay, Inc.  
Mitchell Mfg. Co.  
Minneapolis Show Case & Fixture Co.  
Mueller Brass Co.  
Nash-Kelvinator Corp.  
National Production & Sales, Inc.  
Penn Electric Switch Co.  
Ranco, Inc.  
Remco, Inc.  
Refrigeration Corp. of America  
Servel, Inc.  
Spencer Thermostat Co.  
Sporlan Valve Co.  
Standard Refrigeration Co.  
Superior Valve & Fittings Co.  
Tecomseh Products Co.  
Temprite Products Corp.  
Texas Co., The  
Typhoon Air Conditioning Co., Inc.  
Universal Cooler Div.  
Virginia Smelting Co.  
Wabash Mfg. Co.  
Wagner Tool & Supply Corp.  
Westinghouse Electric Corp.  
Wolverine Tube Div.



## MASTER SERVICE MANUALS

and other books of The Refrigeration Library are handy books to have around. They are written by experts who know "how to make it work." Convenient size, 6 by 8 5/8", inexpensive, authentic, and easy to understand.

### Household Refrigeration



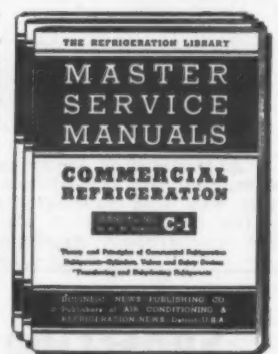
THE MASTER SERVICE MANUALS are best sellers, tops in their field. They were written by K. M. Newcum, a veteran of many years' experience in refrigeration servicing, teaching, selling, and manufacturing. The Master Service Manuals are used by English-speaking students and servicemen in all parts of the world.

Fundamental principles, installation procedure, service operations, adjustment and repair of every part used in household refrigerators are given in a practical, understandable, usable-every-day way.

\$1 EACH.

### Commercial Refrigeration

THE MASTER SERVICE MANUALS on Commercial Refrigeration, written by K. M. Newcum, are the commercial servicemen's handbook of every-day use and reference. They give you installation, operation, adjustment, and repair information on each part used in a commercial refrigeration system. Specific makes of each part are described and illustrated as typical of their types. Handy tables on the properties and characteristics of the major refrigerants and refrigerant cylinder and valve specifications are given for the servicemen's constant use.



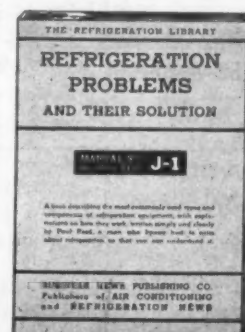
\$1 EACH.

### Refrigeration Problems and Their Solution

by Paul Reed

Handy, practical, reference information for the refrigeration service engineer, "Refrigeration Problems and Their Solution" is written and illustrated so as to be of interest to salesmen, users, and others who want a fuller knowledge of refrigeration.

You'll like the way Paul Reed has organized his material... and he writes clearly, making these books easy to understand and a pleasure to read. And because Paul Reed has such a wealth of practical knowl-



edge of refrigeration, and years of experience behind him, you'll find reading these books the next best thing to a person-to-person chat about your refrigeration problems.

Conveniently cross-indexed for instant use, "Refrigeration Problems and Their Solution" can provide "the missing link" in your search for authentic advice on "how to make it work."

In two volumes, J-1 and J-2, \$1 each.

Order from your parts wholesaler

or

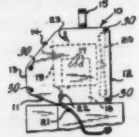
BUSINESS NEWS PUBLISHING CO., 450 W. FORT ST., DETROIT 26, MICH.



# PATENTS

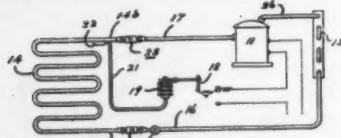
Weeks of Oct. 12 & 19

**2,451,193. PORTABLE AIR CLEARING FAN.** Joseph L. Brandenburg, Brooklyn, N. Y. Application June 21, 1945, Serial No. 600,816. 1 Claim. (Cl. 92-94.)



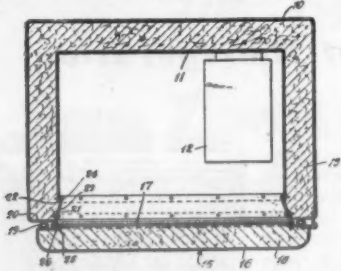
In an air clearing fan having a casing rectangular in cross-section and formed with open ends closed by screens and a motor driven fan disposed centrally within said casing for drawing air into the casing through one screen and exhausting the air through the other tapered to extend over the outer portion of a window stool when said casing is rested on a window sill, means securely supporting the motor of the motor driven fan in the casing with the least resistance to the movement of air through the casing by the support, comprising a U-shaped frame having its intermediate arm securely attached to the bottom wall of the casing, said frame having its side arms extended vertically and spaced a distance equal to the width of the motor to extend along diametrically opposite sides of the motor, said side arms having their top ends formed with lines of openings, and screws passing through said openings and threadably engaging complementary threaded openings in the sides of the motor securely mounting the motor on the top ends of said side arms, said side arms being relatively thin and having their widths extended parallel to the path of travel of the air through the casing.

**2,451,072. REFRIGERATING SYSTEM HAVING THERMOMETER-RECEIVING WELL AT THE EVAPORATOR INLET AND OUTLET.** Lanzo S. Cooper, Piqua, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application July 24, 1946, Serial No. 686,039. 1 Claim (Cl. 62-115.)



A closed refrigerating system comprising in combination, a refrigerant translating device, a cooling element having a refrigerant inlet and a refrigerant outlet, a conduit establishing communication between said device and the inlet of said element and a conduit establishing communication between said device and the outlet of said element, a coupling connecting said first named conduit to said cooling element, a coupling connecting said second named conduit to said cooling element, and each of said couplings having means disposed in the path of flow of refrigerant therethrough and forming a well adapted to receive a thermometer from exteriority of said coupling for indicating the temperature differential between refrigerant entering and refrigerant leaving said cooling element.

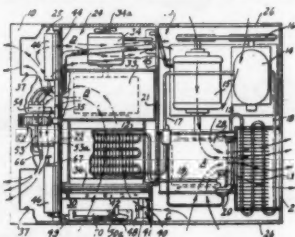
**2,451,286. REFRIGERATOR CONSTRUCTION HAVING MEANS TO RESTRICT MOISTURE IN THE WALLS OF THE CABINET.** Clark C. Heritage, Cloquet, Minn., assignor to Wood Conversion Co., St. Paul, Minn., a corporation of Delaware. Application Aug. 11, 1944, Serial No. 548,946. 10 Claims. (Cl. 62-89.)



1. A refrigerator comprising a cabinet of material and construction which provides wall area substantially impervious to the transmission of water vapor, a food compartment located within said

cabinet and spaced from the interior walls of the cabinet by a space for insulation, thermal insulation in said space of material capable of receiving condensation of water vapor which may be present in said space, said cabinet and said compartment having registering openings for access to said compartment from outside said cabinet, a door mounted on the assembly of said cabinet and compartment to swing for closing said opening in the cabinet, space-confining strip material serving as part of the confining wall area for said space and insulation therein and connecting the walls of said cabinet and said compartment at their openings, said material being in communication with the region within said compartment when said door is in closed position, and artificial refrigeration means within said compartment for cooling the interior thereof, the wall area confining said insulation and separating the same from communication with the food compartment being substantially impervious to the flow of air out of and into said insulation by the suction and pressure of respectively opening and closing said door, and at least a portion of said wall area being transmissive of water vapor for the flow of water vapor from said insulation to the interior of the compartment for effecting the dehydration of said insulation as to any water vapor leaking in said space, the cooling action of said refrigerating means effecting such dehydration when said door is closed.

**2,451,366. AIR CONDITIONING APPARATUS.** Matson C. Terry, Rydal, Pa., assignor, by mesne assignments, to Philco Corp., Philadelphia, Pa., a corporation of Pennsylvania. Application March 16, 1946, Serial No. 654,923. 9 Claims. (Cl. 62-129.)

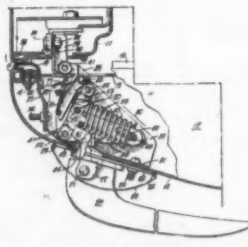


1. In air-conditioning apparatus: an air-conditioning-chamber; means operable to provide refrigeration in said chamber; control means adjustable to start and to stop the operation of the refrigerating-providing means; means including a damper structure selectively adjustable to direct the air from said chamber either to the inside or to the outside of a room; and mechanism including means operable to stop operation of the refrigerating-providing means upon adjustment of said structure to direct air from said chamber to the outside of the room, and also operable to adjust said structure to direct air from said chamber to the inside of the room upon adjustment of said control means to start operation of the refrigeration-providing means.

**2,451,380. LATCH.** George E. Curtiss, Jr., Penn Wynne, Pa., assignor to Philco Corp., Philadelphia, Pa., a corporation of Pennsylvania. Application Oct. 27, 1943, Serial No. 507,839. 9 Claims. (Cl. 292-336.)

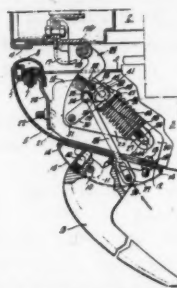
1. In a door latch, a movable latching member, a toggle having one of its links anchored and its other link pivotally connected to said latching member and movable between an extended substantially straight line position and a retracted terminal position to move said latching member into and out of latching position, and spring means impinging against the knuckle of said toggle for moving said member into extended position.

**2,451,381. REFRIGERATOR DOOR LATCH.** George E. Curtiss, Jr., Penn Wynne, Pa., assignor, by mesne assignments, to Philco Corp., Philadelphia, Pa., a corporation of Pennsylvania. Application Dec. 24, 1943, Serial No. 515,570. 11 Claims. (Cl. 292-332.)



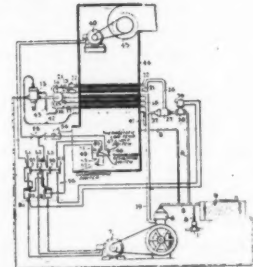
1. A door latch comprising a movable latching member adapted to engage a keeper, a support, toggle means movable to extended and retracted positions to move said member into and out of latch-

ing engagement with said keeper respectively, said toggle means comprising a first link having one end pivoted on said support and a second link having one



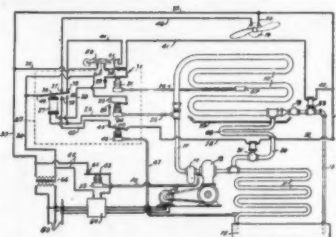
end pivoted on said latching member, said links being pivoted together at their other ends to form a knuckle, spring means interposed between said toggle means and a reaction point removed therefrom effective to move said toggle to its extended position with the said knuckle disposed at one side of the line of thrust of the spring with respect to the pivot of the first link on said support, and manual means for moving said toggle to its retracted position with the knuckle disposed at the opposite side of said line, said toggle being resiliently held in said retracted position by said spring means.

**2,451,385. CONTROL OF CONVERTIBLE EVAPORATOR-CONDENSERS FOR USE IN REFRIGERATIVE CIRCUITS.** Keith P. Groat, York, Pa., assignor to York Corp., York, Pa.



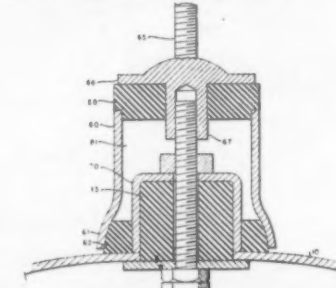
1. The combination of a refrigerative circuit including an evaporator having an inlet for volatile refrigerant and a suction connection; flow controlling means at said inlet adapted to permit free flow into the evaporator and restricted flow in the reverse direction; valve means controlling said suction connection; yielding means normally maintaining said valve means open; a combined expansible chamber motor and flow controller adapted to close said valve means when said motor is subjected to pressure, and so arranged that as the motor moves in valve closing direction it first throttles flow through said valve means and then opens a passage from the expansible chamber motor to the evaporator; a source of warm refrigerant gas under pressure; and a valve controlling flow therefrom to said motor.

**2,451,682. REFRIGERATION SYSTEM USING GAS FOR DEFROSTING.** Ole B. Lund, Havre, Mont.



1. In a refrigerating system having a gas compressor, a suction line leading from said evaporator to said compressor, a condenser receiving the gas from the compressor, and a liquid line carrying the liquid gas from the condenser to the evaporator, means for defrosting the evaporator comprising: a by-pass line extending from the discharge of the compressor to the intake of the evaporator; an electrically controlled valve in said by-pass line; a pressure-operated switch connected to the suction line; electric contacts controlled by said switch, said contacts being arranged to open the first valve and close the second valve when the pressure in the suction line has decreased to a pre-determined point; and means for closing the first valve when the pressure in the condenser has decreased to a certain pre-determined point.

**2,451,701. TERMINAL REPLACEMENT FOR SEALED REFRIGERATION UNITS.** William Wagner, Brooklyn, N. Y.



1. A terminal replacement for a refrigeration unit which is hermetically sealed in a casing and whose original terminals extend through holes in said casing, each original terminal being protected by a collar affixed to said casing and surrounding said terminal, said terminal replacement comprising a sleeve whose lower end flares outwardly to form a skirt, said sleeve being disposed around said collar concentrically therewith, a substantially cylindrical washer disposed between said skirt and said collar, a ring-shaped washer mounted on the top of the sleeve and a nut engaging the original terminal and clamping the ring-shaped washer to the top of said sleeve and also clamping the skirted lower end of said sleeve against the cylindrical washer, and thereby clamping said cylindrical washer to said collar, said nut being provided with an upwardly extending threaded portion which constitutes the extension terminal of the refrigeration unit.

(To Be Continued)

## CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$2.50 per insertion 50 words or under. 5¢ ea. additional word.

RATES for all other classifications \$5.00 per insertion 50 words or under. 10¢ ea. additional word.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

### POSITIONS WANTED

DO YOU have a help problem? Let us solve yours. Available—well trained selective men. These men have completed a course of 34 weeks consisting of practical shop refrigeration. Send for our records. Well trained men for a good job. Available for all parts of the country. THE ST. LOUIS SCHOOL FOR ELECTRICITY & REFRIGERATION, INC., 6767 South-west Ave., St. Louis 17, Mo.

MAN WITH 20 years experience in sales and engineering of refrigeration products with national coverage desires to locate in Detroit area. Offers exceptional record of performance and proved ability. Complete details on background and experience will be sent on request or will welcome personal interviews. BOX 3048, Air Conditioning & Refrigeration News.

SALES EXECUTIVE of many years experience is in a position to represent you in the middle west. Headquarters Chicago. Would prefer product associated with appliance manufacturers, especially household and commercial refrigerators. Past performance available. BOX 3062, Air Conditioning & Refrigeration News.

EXPERIENCED MATURE salesman seeking an established line to sell to restaurant supply, refrigeration dealers, store fixture dealers, appliance dealers. Territorial western Penna., western New York, Ohio, West Va., lower Michigan, Indiana. Reliable, honest, fair. BOX 3066, Air Conditioning & Refrigeration News.

SALES MANAGER now with refrigeration products manufacturer handling national sales to jobbers, desires to relocate with large manufacturer of refrigeration or air conditioning as regional sales manager. Age 45 years, excellent health, many years experience in sales, known to the industry. Can furnish A-1 references. BOX 3069, Air Conditioning & Refrigeration News.

EXECUTIVE ENGINEER: twelve years experience in field of refrigeration and air conditioning. Proven ability in organization and administration. Able to inspire loyalty and co-operation. Desires to apply technical background to broader field than strictly technical. University engineering graduate—age 38. BOX 3070, Air Conditioning & Refrigeration News.

### POSITIONS AVAILABLE

ASSISTANT BRANCH manager needed for wholesale refrigeration supplies warehouse. Must have refrigeration engineering experience. Good salary, profit sharing plan, ideal conditions. Replies must contain complete personal information. Write to: F. H. LANGSEKAMP COMPANY, 229 E. South Street, Indianapolis 4, Indiana.

OPPORTUNITY FOR dairy equipment salesmen calling on refrigeration dealers. We need representatives in several territories. Agent should have kindred but not competitive lines. Product—outstanding packaged aerator milk cooler for farm use. In first letter give references and territory now traveling. STAR PUMP & COOLER CORPORATION, 1218-24 N. 15th St., St. Louis 6, Mo.

SALES ENGINEER; one of Carrier's leading distributors of air conditioning and refrigeration has this opening for one who can assume full responsibility of engineering, estimating, and sale of his own jobs. Applications to 100 tons capacity. Must be thoroughly experienced. We are well established and financed. Located in large middlewestern city. Write full details of experience, age, etc. Guaranteed salary and commission. Your reply will be in confidence. Interview at our expense. BOX 3007, Air Conditioning & Refrigeration News.

CONDENSING UNIT manufacturer has opening for district manager on commercial refrigeration work. Salary and expenses. Prefer resident of Middle Atlantic states familiar with trade in that area. State age, education and experience in first letter. Our employees know of this ad. BOX 3061, Air Conditioning & Refrigeration News.

DISTRICT SALES manager for manufacturer of air conditioning equipment, for territory consisting of Michigan, Indiana, Ohio, Kentucky and West Virginia. Right man should have air conditioning background, preferably with a manufacturer, and experience in handling dealers and distributors. This position calls for a \$10,000.00 a year man. In reply, give age and full details of background. BOX 3063, Air Conditioning & Refrigeration News.

SALES ENGINEER with previous refrigeration wholesaler experience needed by independent Ohio wholesaler to contact industrial accounts, dealers, distributors, contractors, servicemen. Salary and commission. Give complete background, age, compensation desired. All replies confidential. BOX 3065, Air Conditioning & Refrigeration News.

LARGE MANUFACTURER, expanding field organization, has opening for experienced field sales personnel promoting sales of small condensing units through distributors and jobbers. Also need men to handle distributors' sales of self-contained commercial refrigeration equipment

including water coolers. Salary commensurate with experience and ability. Give complete details, record of past earnings, and state territorial preference. Write BOX 3072, Air Conditioning & Refrigeration News.

### EQUIPMENT FOR SALE

SURPLUS "FREON" valves! 1,500 new clean valves priced under jobbers cost, freight prepaid. Kerotest # 4618 2 1/2" wing-cap globe @ \$19.76. # 5745 1 1/2" wing-cap globe @ \$8.55. # 69818 3/4" angle packless @ \$3.00. # 2355 3/4" receiver valves @ 75¢. # 518300 3/4" relief @ \$3.45. Mueller 3/4" flare packed globe @ 85¢. ANCHOR SUPPLY CO., 1742 Fourth South, Seattle 4, Wash.

SEALED UNITS rebuilt and exchanged. Prompt service on Coldspot (sealed & semi-sealed), Chieftain, Gale, Tecumseh, Norge and many others. One year guarantee. Write for price list and shipping instructions. BRIGHTON, 3906 Joy Rd., Detroit 6, Michigan.

FOR SALE: 1 Super-Cold model 500 FR ice cream freezer; 5 gallon, 2 HP, 110/220, single phase, water cooled compressor. 1 Super-Cold model 200 FR ice cream freezer; 2 1/2 gallon, 1 HP, 110/220, single phase, water cooled compressor. DETWEILER BROS., INC., P.O. Box 870, Twin Falls, Idaho.

FOR SALE 3-HP water cooled, "Freon" Copeland machines with 3-HP 3 phase motors \$248.00 each. Ten model 495 5-HP Copeland water cooled "Freon" machines equipped with 26 Copeland compressors and 5-HP 3 phase motors \$278.00, all F.O.B. Kansas City, Missouri. These machines are brand new in original Copeland crates and carry the one year factory guarantee. 10% deposit required with all orders, balance C.O.D. THE NAT CORPORATION, 2710 McGee, Kansas City, Missouri.

SUBJECT TO prior sale: Hermetic Chieftain units—1/4 H. P., \$44.50; 1/2 H. P., \$48.50. Other well known hermetics: 1/4 H. P., fan cooled, \$52.50; 1/2 H. P., fan cooled, light duty, \$57.50; 1/2 H. P., fan cooled, heavy duty, \$59.50; 1/2 H. P., fan cooled, \$69.50. Open units, standard makes: 1/4 H. P., \$34.50; 1/2 H. P., \$64.50; 1/2 H. P., \$84.50. Above prices quoted on lots of six. All open units are 60 cycle, single phase. All above units new, carrying factory warranty. Write for unit list. Penn type 260 Apol low pressure control, \$4.25. Penn type 262 Apol high pressure control, \$4.25. Minneapolis-Honeywell dual pressure control, \$4.50. Detroit Lubricator low pressure control, \$4.25. G. E. blower fan motor with 10" fan, \$4.50. Superior heat exchanger, 13" over-all, 3/4" x 3/4", \$4.25. Mueller heat exchanger, 14 1/2" over-all, 3/4" x 3/4", \$5.00. Kramer Trenton panel blower complete, 1/2 ton, \$30.00. Superior master drier 1/4" flare x 1 1/4" x 5 1/2", 75¢. U. S. "Freon" gauge, 4 1/2" face, 30" vac., 150# or 300#, with corresponding temp. scale with red warning hand and mounting holes, \$4.50. Scientific Instrument Co. dial thermometer, 4 1/2" face, minus 40 to plus 120, 5 ft. tube, \$4.50. 1 set U. S. "Freon" gauge, 2 1/2" face, 100# compound and 300# pressure, temp. scale, recal. and mounting holes, \$3.50. Ranco type KW-412 cold control complete, \$4.00. American injector oil separator, 1/2 ton, \$3.50. Cold plates 1-30" x 55", 2-30" x 64", 3 to a set, \$35.00. 6-5 lb. cans Davison refrigeration silica gel, \$6.00. 1-5 lb. can Davison refrigeration silica gel, \$1.10. Crouse-Hinds vapor proof refrigerator light, with guard, \$2.50. WALTER W. STARR, 1207 George Street, Chicago 13, Illinois.

OVERSTOCK—LIMITED number of new "F-12" hermetic condensing units, either normal or low temperature. Manufacturer's one year warranty, original packing. 1/4 HP—\$30.00, 1/2 HP—\$35.00. Control \$4.50 extra if desired. Prompt shipment. BOX 3025, Air Conditioning & Refrigeration News.

BEAUTIFULLY DESIGNED and equipped sea food, salad, & cocktail bars. Occupies less than six square feet of floor space. Wired for illumination. Sturdy stainless steel, chrome and glass. Equipment includes beautiful chrome and glass serving accessories for forty-eight. Hundreds sold for \$1040.00; few remaining, \$935.00. Orders accepted subject to prior sales, literature upon request. BOX 3056, Air Conditioning & Refrigeration News.

### BUSINESS OPPORTUNITIES

MIAMI, FLORIDA—a leading refrigeration, air conditioning, television, and appliance sales and service establishment—in same Miami location ten years. Grossed \$150,000 and netted \$20,000 last year. Will sell for \$7,500 to cover truck, equipment, and improvements plus merchandise inventory at cost—about \$5,000. BOX 2992, Air Conditioning & Refrigeration News.

COMMERCIAL REFRIGERATION business located in center of southwestern oil district. National franchise. Will sell for inventory plus equipment. Approximately \$8,000. Reason, other business interests. For information write BOX 3067, Air Conditioning & Refrigeration News.

### MISCELLANEOUS

NON-REFRIGERATED MODULE super-market fixtures, complete line. District men—give your refrigeration dealers and chain operators a complete store engineering service with a quality line of module engineered fixtures. Factory trained store planning and installation service available exclusively to you and your customers. Our salesmen are informed of this advertisement. Reply BOX 3068, Air Conditioning & Refrigeration News.

## Subscribe Now

Receive the greatest trade paper in the Industry—AIR CONDITIONING & REFRIGERATION NEWS. Published every week. Brings you latest news and vital information on household refrigeration, commercial refrigeration, air conditioning, home freezers; manufacturing, distributing, retailing, servicing, and contracting. Only \$5 per year, 52 issues.

Fill in coupon and mail today

AIR CONDITIONING & REFRIGERATION NEWS  
450 West Fort Street, Detroit 26, Michigan

Gentlemen: Send the NEWS for one year.

☐ \$5 enclosed ☐ Bill me ☐ Bill the company

Name .....

Company .....

Street .....

City ..... Zone ..... State .....

1-17-49







## NARDA Resolution--

(Concluded from Page 1, Column 3)

Goodman, newly-elected president of the National Retail Furniture Association, that fair trade laws should be repealed.

NARDA's directors also:

1. Set up for the first time an executive committee, consisting of the officers and two directors. This committee will also act in an advisory capacity on budget and finance matters.

2. Approve a cost-of-doing-business survey for 1949. The survey, which will be analyzed by Richard E. Snyder, NARDA economist, will get under way immediately.

3. Decided that annual meetings of the association will continue to fall on the second week of the January home furnishings markets in Chicago.

4. Announced that a mid-year meeting will be held the second week of the summer markets. The meeting will consist of two breakfast sessions featuring prominent industry speakers, and panel discussions on current important aspects of the industry as they relate to dealers. This meeting will be the beginning of annual mid-year programs designed to attract those appliance and radio dealers attending the summer markets.

5. In connection with NARDA's 1949 membership campaign—soon to be launched—authorized establishment in the immediate future of state committees to coordinate local drive activities with the national program.

6. Decided to hold board meetings quarterly (in January, April, July, and October.)

### 1949 PROGRAM COMING

It was also announced that NARDA's 1949 program will be completed within the next month. This program is to be based on the thinking expressed at panel discussions during the just-completed convention.

Predominant theme of talks by executives of appliance manufacturers was that 1949 will be a year of both "inevitable mortality" and "unprecedented opportunity." H. L. Clary, Norge's director of sales, told the dealers that "the day of specialty selling is back in the home appliance industry."

"We are now entering an era when sound planning and good merchandising will offer substantial rewards to good businessmen," he said. "At the same time, the retail proprietor who has not properly earned his place in the distribution of major appliances . . . will start to lose his grip and will be propelled toward the discard in this fast-moving and highly competitive industry."

To emphasize the opportunity 1949 offers, Clary cited figures showing that today, there are 20 million more wage earners than in 1937 ("the outstanding year of the thirties"), earning two and a half times as many dollars after taxes, living in 54% more wired homes. Only one home in every three has purchased a postwar refrigerator, electric range, or washer, he stressed.

But, he pointed out, a survey just completed by the National Electrical Manufacturers Association—"probably the first careful count of major appliance dealers attempted in many years"—indicates that there were 88,813 dealers in the United States handling at least one line of domestic mechanical refrigerators late in 1948.

Noting that this figure compares with a pre-war estimate of 45,000 to 50,000 dealers, Clary declared:

### CHANCE FOR MORE DEALERS

"With the expanded market brought about by a wider base in our population now able to purchase appliances; the drastic reduction of domestic help; the addition of new and improved modern household labor-saving devices, certainly 50,000 dealers would not be adequate today."

"On the other hand, approximately

## Officers Elected for 1949



New officers and members of the board of directors elected last week at the first annual meeting of the National Appliance & Radio Dealers Association are, standing (l. to r.): Mori Farr, Upper Darby, Pa.; Ron Garlock, Lansing, Mich.; E. O. Kuehn, Belleville, Ill.; Phil Urner, Bakersfield, Calif.; Gardner Cole, Scituate, Mass.; Julius Kovach, Racine, Wis.; and Harry Price, Norfolk, Va. Seated (l. to r.) are: C. C. Simpson, managing director; M. E. Brunderman, Chicago, secretary; James Lee Pryor, Wilmington, Del., president; Vergal Bourland, Fort Worth, Tex., vice president; and J. A. Cobbey, Chicago, association attorney. Elected treasurer was K. J. Stucky, Fort Wayne, Ind. (not pictured). Pryor succeeds Herb Names, Denver, as president. T. A. Reina is also a director.

90,000 dealers is a staggering increase in the national dealer organization and indicates an inevitable mortality. Your answer to escape this mortality is to earn recognition in your respective communities as 'home appliance headquarters'."

At a luncheon session, T. J. Newcomb, general sales manager of Westinghouse, said "there is no industry in this wide world that has such unlimited potentials as the electric appliance industry, or the electrical industry as a whole." He warned, however, that "the time has now arrived when our plan of action must be well crystallized without further delay."

"1949 is, in my opinion, going to be the acid test as to who will survive and who will perish in this transition from a seller's to a buyer's market," he predicted. "The weak will definitely fall and even the strong may stagger."

"I am confident that, with the exception of refrigerators, there will be plenty of appliances available and also plenty of Mrs. Housewives who will want them. However, they won't be breaking down our doors begging to have us take their business. We have got to start banging on their doors, asking, pleading, and finessing with a lot of good old selling thrown in."

Except for Clary's talk, the opening session was devoted mainly to outlining the need for a national dealer association and its advantages. Presentations on this subject were given by Sam Vining, merchandising consultant for Westinghouse; Cliff Simpson, NARDA managing director; Harold E. Jalass, vice president and general sales manager, Cribben & Sexton; Ben T. Wright, president of the National Automobile Dealers Association; and Wallace Ollman, general manager of the Merchandise Mart, Chicago.

Keynote talk at this session was made in his own inimitable style by Vining, substituting for retiring president Names, who was prevented from attending by illness.

Vining observed that he is looking at 1949 as neither a buyer's nor seller's market but as a salesman's market. He elaborated:

### RETAILER 'GRIPES'

"Your business will depend on the number of times that you have a good salesman talking face to face to a woman with her hand in her husband's pants' pockets. If you don't do just exactly that, it won't do any good to have slogans."

Cautioning that complacency will be the big danger this year, Vining said:

"We must honestly analyze our market to find out who the man is we want to sell and where he lives. Then, we must determine how we are going to reach him, and, after reaching him, what we are going to tell him."

"If you can do that, I think you can look forward this year to the theme that the market is not full, that people have money and that they are waiting for us to come and see them."

Jalass emphasized that a misunderstanding of the break-even point can play havoc with dealers' profits. He warned the retailers against excessive trade-in allowances, special premiums, mark downs on inventory, and excessive expenditures on special promotions in attempting to increase sales volume.

Most of the other sessions were

given over to nine panel discussions. During these panels, dealers, manufacturers, and others expressed their views on the dealer's 1949 sales effort, installation problems, radio-television selling in 1949, manufacturer-distributor-dealer relations, business efficiency, small appliances, dealer franchises, manufacturer-distributor service to dealers, and expansion of NARDA.

One of the discussants on the panel on sales stressed that dealers must strengthen their sales efforts to survive the "weeding out" he foresees in 1949. Another said the retailer "must have a complete survey of his trade area."

The forum on installation brought forth the opinion from one participant that adherence to the National Electrical Code "is not responsible for high building costs." One of the other speakers urged cooperation with electrical contractors and plumbers on this problem. If this should fail, the appliance dealer "would be forced to find some means to train a specialty man for the installations of the equipment we now sell," he said.

The panel on manufacturer-distributor-dealer relations revealed these "gripes" of retailers: "unwillingness" of some distributors to carry adequate replacement parts for automatic washers, refrigerators, and home freezers; excessive franchising; lack of price protection from some manufacturers; announcement of models by years; the present "low" mark up; and elimination of the 20% cash discount.

Some "fireworks" broke out during the panel on small appliances. When the forum was opened for discussion from the floor, three dealers took the sales manager of a small-appliance

manufacturer sharply to task for his company's alleged unfair distribution of its product. They claimed, among other things, that non-servicing dealers had received deliveries while they were given little if any.

While admitting that "we have made mistakes," the executive replied that his company has tried to do a sincere job of equitable distribution. He said his firm had ceased to do business with distributors it had found to be distributing unfairly. The company, he declared, would continue to do all in its power to assure fair distribution.

Spirited discussion from the floor was also touched off by a discussant on the franchise panel who proposed, among other things, that franchises should be perpetual, with one dealer for each 50,000 population and one line for each dealer. He also called for legislation whereby an appliance manufacturer would manufacture only, a distributor distribute only, and a retailer retail only, with utilities barred from retailing.

The convention heard another dealer on this panel declare that franchises "are worthless unless you have positive assurance from the manufacturer that they will be improved drastically; that the number of dealers will be reduced; that the discounts will be bettered, and that the unfranchised dealers will be totally eliminated."

A third participant suggested that in the future "all franchises must originate at the factory level to include the radio and appliance dealers" and that "we must ask to have representation at all future factory-distributor meetings on any and all occasions when policy and/or practices of product distribution are to be their topics for discussion."

## EVERY HENRY<sup>\*</sup> Abso-Dry DRIER CARRIES THIS GUARANTEE



Every Henry Abso-Dry Drier with flare connections is pressure sealed with dehydrated air. When the flare nuts and seal bonnets are loosened at the time of installation, this air escapes with a hiss, indicating that the dehydrant is in factory-fresh condition and that the unit is free from leaks. THE ABSO-DRY PROCESS IS AN EXCLUSIVE HENRY PATENT.



In addition to the advantages offered by the Abso-Dry process, Henry gives you in most driers these additional features:

1. A patented dispersion tube that exposes the entire volume of silica-gel to penetration by the refrigerant.
2. A patented dehydrant compression spring that reduces dehydrant abrasion.
3. A 30 x 250 mesh monel filter that will not collapse under any ordinary system pressure.
4. Forged brass end cap construction with integral connections. Wide wrench flats.
5. Patented 8-Bolt distortion-proof flange design in cartridge type driers.
6. Silver brazed construction.
7. Polished and lacquered natural brass finish.
8. Driers with flare end connections furnished with flare nuts and seal bonnets.

The Henry Abso-Dry process gives an on-the-job confidence that no other drier can give, an assurance that the dehydrant has maximum absorbing efficiency when installed in a refrigerating system.

ON YOUR NEXT JOB USE HENRY<sup>\*</sup> Abso-Dry DRIERS AND NOTE THE DIFFERENCE

SOLD BY LEADING WHOLESALERS

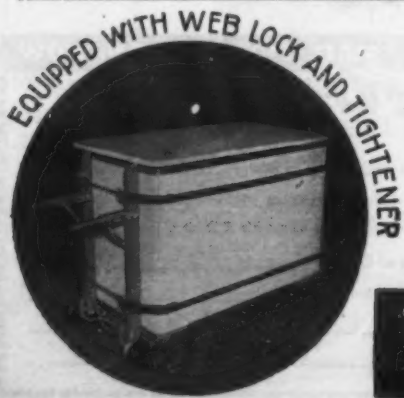
## HENRY VALVE CO.

Melrose Park, Ill. (Chicago Suburb) • Cable: HEVALCO Chicago.

\* Registered U.S. Pat. Off.



Valves, Driers, Strainers, Control Devices and Accessories for Refrigeration and Air Conditioning and Industrial Applications.



Are You Looking for An Easy Way to Handle Stoves, Refrigerators and Freezers

Solve Your Problem with the New ROLL-OR-KARI Dual Trucks

Patented Step-On-Lift • Folding Handles  
Capacity 1000 Lbs. • Shipping Weight 40 Lbs.  
WRITE TODAY

THE ROLL-OR-KARI CO.  
MANUFACTURERS  
ZUMBROTA • MINNESOTA